

**An Investigation into  
the Potential of *Design for Sustainability* in  
the Handicrafts of Northern Thailand**

**Disaya Chudasri**

B.Arch. (Industrial Design) (Hons), M.Des.

Lancaster Institute for the Contemporary Arts

Lancaster University

30 April 2015

This thesis is submitted in fulfillment of the requirements for the degree of

Doctor of Philosophy

ProQuest Number: 11003586

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



ProQuest 11003586

Published by ProQuest LLC (2018). Copyright of the Dissertation is held by the Author.

All rights reserved.

This work is protected against unauthorized copying under Title 17, United States Code  
Microform Edition © ProQuest LLC.

ProQuest LLC.  
789 East Eisenhower Parkway  
P.O. Box 1346  
Ann Arbor, MI 48106 – 1346

For peace and happiness  
to the masses of people worldwide, including my beloved country, Thailand  
– and for the craft spirit to flourish

# **An Investigation into the Potential of *Design for Sustainability* in the Handicrafts of Northern Thailand**

Disaya Chudasri, B.Arch. (Industrial Design) (Hons), M.Des.  
Lancaster Institute for the Contemporary Arts, Lancaster University  
30 April 2015

---

## **Abstract**

This research investigates the potential of *design for sustainability* in the handicrafts of northern Thailand. It provides an in-depth understanding of the relationship between craft and *design for sustainability*, and examples of handicrafts and their potential links to *design for sustainability*, focusing especially on handwoven textiles. Research strategies include a literature review, semi-structured interviews and case studies. Seven main research findings are identified.

1. Handicraft production (including the weaving of the Tai Yuan ethnic group in northern Thailand) is compatible with all the elements in Walker's Quadruple Bottom Line of Sustainability (personal meaning, social responsibility, environmental care and economic viability).
2. Three handicrafts were found to have strong potential for *design for sustainability*, including textiles, furniture and jewellery. This is based on four critical factors affecting the long-term viability of handicraft enterprises, namely: production capacity, product viability, market feasibility and legislation.
3. There are four areas of *design for sustainability* that can ensure the long-term viability of handicraft communities and enterprises: (i) product design and development, (ii) design for marketing and sales, (iii) production development and (iv) knowledge transfer and knowledge development.
4. Weaving courses and training are key mechanisms for transferring textile knowledge. Yet these are not sufficiently available, especially to the younger generation.
5. Developments in the handicraft communities lead in one main direction, namely towards the revitalization, preservation and commercialization of handicrafts. It is crucial to explore directions that can better connect handicrafts with the younger generation and enable producers to adopt a more entrepreneurial approach.
6. *Chok* textiles are available at varying prices and quality in the market. Yet information about the product quality is understated and undifferentiated. More adequate information about the product quality (i.e. production techniques and processes) as well as about the unique identity and cultural heritage, ethical production and fair trade, is required to stimulate purchasing decisions.
7. The supply chain of handwoven textiles in this region falls into three main categories: stakeholders, producers' service areas and trade channels.



# Acknowledgements

Over the course of this research, I have received support from a number of people in several forms, including advice, collaboration, encouragement and funding. Without them, it would not have been possible to complete this doctoral study.

I would first like to thank my supervisors, Professor Stuart Walker and Dr. Martyn Evans. I am very fortunate to have had the opportunity to learn from Stuart. I am extremely grateful for his continuous support. Over the years, he has constantly demonstrated several qualities (other than being knowledgeable) that I have gradually become imbued within, such as meeting high standards, punctuality, decisiveness, focus, assertiveness, liberation and patience. Thanks also to Martyn for being clear-cut in meetings and providing useful information and encouragement.

I would also like to thank the rest of the staff at Lancaster University, especially the administrative and teaching staff in the Lancaster Institute for Contemporary Arts and ImaginationLancaster, the Faculty of Arts and Social Sciences, Graduate College, the Base, the library and other training/coaching programmes, particularly Professor Lynne Pearce and Professor Lucy Suchman who gave such meaningful messages in the Research Training Programme.

At Lancaster University, several activities are always going on. These helped to me to make and connect with other friends within and beyond Lancaster University. My gratitude must be expressed to friends based in the UK for sharing experiences, offering help, encouragement and motivation and being together occasionally, especially Design friends at ImaginationLancaster and the HighWire Centre for Doctoral Training, office mates, friends in the Graduate College, the Department of Linguistics and English Language and proof-readers.

My deepest thanks must go to the informants involved in the semi-structured interviews and case studies in Thailand and the reviewers involved in the validation of research findings in Thailand, Japan and India, who gave their time, cooperation and relevant information.

Unfortunately, in a research project, it is advised that informants should remain anonymous. In India, thanks especially to: Professor M.P. Ranjan (at the National Institute of Design, Ahmedabad) who showed me around and introduced me to scholars; Meghana Singh and Anuja Kumar (at the Indian Institute of Crafts and Design, Jaipur) for insights and arranging for a group of undergraduate students to attend a dissemination and validation of the research findings; and drivers.

Tremendous thanks must go to those making a financial contribution to this study, especially my parents and the College of Arts, Media and Technology at Chiang Mai University, Thailand, for their partial funds. Thanks also to Asst.Prof.Dr. Noppasit Chakpitak and Asst.Prof.Dr. Pitipong Yodmongkol, Deans of the College and the staff involved in pursuing the funding process. Thanks also to the funding schemes and their staff involved, including: the PGR Conference Travel Fund of the Faculty of Arts and Social Sciences and the William Ritchie Travel Fund at Lancaster University, the UK; a grant for the exchange of scholars between Thailand and India by the National Research Council of Thailand and the Indian Council of Social Science Research; and a grant for workshop participants in the programme, "British Council Researcher Links" by the British Council and the Thailand Research Fund. And thanks to my aunts for pocket money.

I happily admit that the words of my father and a former teacher (Orrasa Jirapinyo) encouraged me to consider a career shift from the private sector to the public/academic sector. Indeed, this has let me appreciate the value of self-development through the role of educator and the process of doctoral study. Lastly, I should not forget to express my deep gratitude to: my parents and siblings, my relatives in Thailand and overseas and my Thai friends – for their unwavering support, listening, love and care. Thank you very much indeed to all of you for being part of my wonderful memories of doctoral study. I will certainly remember you.

# Declaration

I hereby declare that this thesis is my own work and has not been submitted in substantially the same form for the award of a higher degree elsewhere. To the best of my knowledge, it does not contain any materials previously published or written by another person or persons, except where due references have been made in the text.

---

Disaya Chudasri

# Contents

<i>Abstract</i>	<i>ii</i>
<i>Acknowledgements</i>	<i>iii</i>
<i>Declaration</i>	<i>v</i>
<i>List of Figures</i>	<i>xi</i>
<i>List of Tables</i>	<i>xii</i>
<i>Glossary of Terms</i>	<i>xv</i>
<b>Chapter 1: Introduction</b>	<b>001</b>
1.0 Background to this research	001
1.0.1 Aspirations that led the researcher to doctoral study	001
1.0.2 Inspirations for research into craft and <i>design for sustainability</i>	001
1.1 The elements of this research	002
1.2 Validation of the research findings	005
1.2.1 Publications resulting from this research	007
1.3 Structure of this thesis	007
<b>Chapter 2: Sustainability and Design</b>	<b>010</b>
2.0 Introduction	010
2.1 The emergence and evolution of sustainability	010
2.1.1 The first pressure wave of environmentalism or limits (1960s–1970s)	010
2.1.2 The second wave of green pressure (1980s–1990s)	012
2.1.3 The third pressure wave of sustainability (from 1999 until the present day)	015
2.2 Various conceptions and contemporary understandings of sustainability	016
2.2.1 The Brundtland definition of sustainable development and criticism of it	017
2.2.2 Various conceptions of the sustainability terms	018
2.2.3 Rethinking the relationship between sustainability and development	019
2.2.4 Our contemporary understanding of sustainability	021
2.3 Design in relation to sustainability	024
2.3.1 Design as a dilemma in relation to sustainability issues	024
2.3.1.1 Art, craft and design in the context of industrialization	024
2.3.1.2 Design for mass production, commodities and consumerism	026
2.3.1.3 Design in the context of globalisation	027
2.3.2 Design in the transition to a sustainable society	028
2.3.3 <i>Design for sustainability</i>	030
2.4 Chapter summary	031
<b>Chapter 3: Craft in General and in the Context of Sustainability</b>	<b>034</b>
3.0 Introduction	034
3.1 Craft in general	034
3.1.1 Explanation of craft	034
3.1.1.1 Dictionary definitions of “craft” and “handicraft”	034
3.1.1.2 Scholarly descriptions of “craft” and “handicraft”	035

3.1.1.3	Ways to view craft for research purposes	037
3.1.2	Classifications of crafts	039
3.1.2.1	Crafts classified by the progressive theory of history	039
3.1.2.2	Crafts in critical discourses and thematic terms	040
3.1.2.3	Crafts classified by business operation	042
3.1.2.4	Crafts in manufacturing and industrial economic activities	043
3.1.2.5	Craft in the creative industry and the creative economy	044
3.2	Craft and its historical development in the context of sustainability	045
3.2.1	Craft and pre-industrialization (before 1750)	046
3.2.2	Craft and the Industrial Revolution (ca.1750–1900)	048
3.2.2.1	The foundations for the expansion and changes in craft production	049
3.2.2.2	Critical views of the Industrial Revolution	050
3.2.2.3	The Arts and Crafts Movement as a response to industrial manufacture	051
3.2.3	Craft and mass production (from the 20th Century)	052
3.2.3.1	Art, craft and design as means of production	052
3.2.3.2	The integration of craft- and machine-based forms of production	055
3.2.3.3	The effects of mass production at the global level	055
3.2.3.4	The effects of mass production on craft	056
3.2.3.5	Craft for the implementation of sustainability	057
3.3	Craft and <i>design for sustainability</i> (the 21 <sup>st</sup> century)	058
3.3.1	Traditional craft and areas for design contribution	058
3.3.2	Examples of craft-based design enterprises for sustainability	060
3.4	Chapter summary	064
<b>Chapter 4: Crafts in Thailand and a Specific Region for Study</b>		<b>068</b>
4.0	Introduction	068
4.1	The meaning of “craft” and “handicraft” in the Thai context	069
4.1.1	Existing terms in relation to craft	069
4.1.2	Emerging terms in relation to craft	071
4.2	The development of handicraft production in Thailand	073
4.2.1	Handicrafts in the 19 <sup>th</sup> century (1801–1900)	073
4.2.2	Handicrafts in the 20 <sup>th</sup> century (1901–2000)	073
4.2.3	Handicrafts in the 21 <sup>st</sup> century (2001 to the present)	077
4.3	Problem identification	079
4.3.1	Traditional handicrafts in decline	079
4.3.2	A need for sustainable development	080
4.3.3	Deficiencies in studies of more recent developments in handicrafts	080
4.3.4	Different perspectives on handicrafts: tradition, commercialization and modernity	081
4.4	Northern Thailand – a specific region for study	083
4.5	Investigation into handicrafts in northern Thailand	083
4.5.1	Classification of crafts in northern Thailand	084
4.5.2	Challenges and opportunities for design	086
4.6	Chapter summary	089
<b>Chapter 5: Conclusion from the Key Findings of the Literature Review and Research Questions</b>		<b>093</b>
5.0	Introduction	093
5.1	Summary of the key findings from the literature review chapters	093
5.2	Conclusion	097

5.2.1	Redirecting the role of <i>design for sustainability</i> in relation to handicrafts	097
5.2.2	Collecting case studies of handicrafts that demonstrate the potential of <i>design for sustainability</i> to develop an in-depth understanding of and action for sustainability	099
5.2.3	Identifying potential areas of <i>design for sustainability</i> that can ensure the long-term viability of the handicraft production	099
5.3	Chapter summary: Research aims and research questions guiding field research	101
<b>Chapter 6: Research Methodology</b>		<b>103</b>
6.0	Introduction	103
6.1	The literature review	107
6.2	Details of the semi-structured Interviews	108
6.2.1	Data collection and validation	109
6.2.2	Data preparation and analysis	112
6.2.3	Research findings and validation	114
6.2.4	Key findings leading to case studies	115
6.3	Details of the case studies	115
6.3.1	Overview of the three case studies in weaving and handwoven textiles	116
6.3.2	Identification of the case studies and selection criteria	121
6.3.3	Data collection and validation	122
6.3.4	Data preparation and analysis	126
6.4	An analysis of all the key findings from the three major data sources	128
6.5	Chapter summary	128
<b>Chapter 7: Findings from Semi-structured Interviews</b>		<b>129</b>
7.0	Introduction	129
7.1	The current situation of the handicrafts sector of northern Thailand	129
7.1.1	Finding 1: The current state of handicraft production in northern Thailand	130
7.1.2	Finding 2: Factors involved in the development of handicraft enterprises	131
7.1.3	Finding 3: Call for change to ensure the continuance of handicraft production	134
7.2	The perspectives of people involved in the handicrafts sector on sustainability	135
7.2.1	Finding 4: The relationship between handicraft production and the Triple Bottom Line of Sustainability (Elkington, 1997)	136
7.2.2	Finding 5: Other elements contributing to/affecting the sustainable development of handicraft enterprises	137
7.2.3	Finding 6: Problematic issues related to the understanding of sustainability	138
7.2.4	Finding 7: Core elements necessary for the viability of handicraft production and their relationship to design and the fourth element of sustainability	141
7.2.5	Finding 8: Handicrafts as national identity – going beyond monetary value and economic indicators	143
7.3	The supply chain of the handicrafts of northern Thailand, including handicrafts with strong potential, potential markets and directions for development	145
7.3.1	Finding 9: The supply chain of the handicrafts of northern Thailand	145
7.3.2	Finding 10: Handicrafts with strong potential for development for long-term viability	147
7.3.3	Finding 11: Potential markets for handicrafts and market components	151
7.3.4	Finding 12: Directions for development of the handicrafts sector	154
7.4	Validation of the research findings	155
7.4.1	Validation of the research findings via peer review	155
7.4.2	Feedback from the reviewers	158

7.4.2.1	Feedback on the overall visualizations of information about the handicraft enterprises of northern Thailand in relation to <i>design for sustainability</i>	158
7.4.2.2	Feedback regarding beneficiaries, i.e. those who might benefit from the research findings	160
7.4.2.3	Feedback regarding the research methodology	162
7.5	Chapter summary	163
<b>Chapter 8: Findings from the Case Studies</b>		<b>165</b>
8.0	Introduction	165
8.1	Case study 1: Weaving communities in Long district (Phrae province)	165
8.1.1	Finding 1: Background of textiles in Long district (1950–2012)	166
8.1.1.1	Development in textile production (1950–2012)	166
8.1.1.2	The changing significance of weaving in relation to income generation	169
8.1.1.3	Feedback on development projects run by government departments/agents	170
8.1.2	Finding 2: Current practices in textile products, production and sales	170
8.1.2.1	Products	170
8.1.2.2	Production	171
8.1.2.3	Sales	179
8.1.3	Finding 3: The main area for future development: weaving knowledge	181
8.1.3.1	Problem identification	181
8.1.3.2	Mechanisms for transferring knowledge in weaving and providing information about ethnic textiles	183
8.1.3.3	Discussions and recommendations specific to weaving courses and training	184
8.2	Case study 2: Weaving community in Mae Chaem district (Chiang Mai province)	186
8.2.1	Finding 1: Development projects in the weaving communities	186
8.2.1.1	Contextual factors in the 1990s	187
8.2.1.2	Feedback on development projects	187
8.2.1.3	Development projects led by a non-governmental group	188
8.2.2	Finding 2: The way of life of the people in Mae Chaem district	191
8.2.2.1	Principles of life	191
8.2.2.2	Local occupations	193
8.2.2.3	The values associated with traditional weaving and <i>chok</i> textiles	195
8.2.3	Finding 3: Community enterprises for textiles and garments	196
8.2.3.1	The mindset of people in the textile business	196
8.2.3.2	Objects and products	198
8.2.3.3	Production	200
8.2.3.4	The sales system	202
8.2.3.5	Emerging issues in relation to knowledge	204
8.3	Case study 3: A company running weaving courses and training in Bangkok	208
8.3.1	Finding 1: Reasons for establishing the company	208
8.3.2	Finding 2: Weaving courses, services and products	210
8.3.3	Finding 3: Customers' perspectives on the weaving courses and comments from the business owner on weaving training	213
8.3.3.1	The customers' perspectives	213
8.3.3.2	The perspective of the researcher as a customer	214
8.3.3.3	Comments from the business owner on weaving training	214
8.4	Chapter summary	215

<b>Chapter 9: The Seven Main Research Findings, and Conclusions</b>	<b>217</b>
9.0 Introduction	217
9.1 Main research finding 1 (Handicraft production... is compatible with... Sustainability...)	218
9.2 Main research finding 2 (Three handicrafts... have strong potential... four critical factors...)	222
9.2.1 Three handicrafts in northern Thailand that have strong potential in terms of <i>design for sustainability</i> – and a handicraft identified for in-depth case studies	222
9.2.2 Four critical factors affecting the long-term viability of handicraft enterprises in northern Thailand	226
9.2.3 Compatibility of the elements of the four critical factors affecting the long-term viability of handicraft enterprises with the elements in Walker’s Quadruple Bottom Line of Sustainability	229
9.3 Main research finding 3 (... four areas of <i>design for sustainability</i> ...)	230
9.3.1 Product design and development	231
9.3.2 Design for marketing and sales	231
9.3.3 Production development	232
9.3.4 Knowledge transfer and knowledge development	233
9.4 Main research finding 4 (Weaving courses and training... for transferring textile knowledge...)	235
9.5 Main research finding 5 (...to explore directions... connect handicrafts with the younger generation...)	237
9.6 Main research finding 6 ( <i>Chok</i> textiles... more adequate information about...)	239
9.7 Main research finding 7 (The supply chain of handwoven textiles...)	241
9.8 Summary of the seven main research findings	243
9.9 Contributions to knowledge and potential beneficiaries	244
9.9.1 <i>Original</i> contributions to knowledge	244
9.9.2 General contributions to knowledge	245
9.9.3 Potential beneficiaries	245
9.10 Limitations of the research and further research	246
9.10.1 Limitations of the research scope, research strategies and data sources	246
9.10.2 Limitations regarding the validity, reliability and generalizability of the research findings	247
9.10.3 Aspects of the research outcome and value thereof in wider implications	248
9.11 Concluding remarks	249
<b>References</b>	<b>252</b>
<b>Appendices</b>	
A -- <i>A literature review of six enterprises in craft-based design manufacturing</i>	260
B -- <i>Documents related to ethical approval and consent from informants for field research</i>	273
C -- <i>Three grouping of the 26 informants in semi-structured interviews, and their attributes</i>	278
D -- <i>The development of selection criteria for case studies</i>	280
E -- <i>Visualizations of the research findings resulting from semi-structured interviews</i>	284
F -- <i>A poster of the main research findings from this study</i>	292



# List of Figures

## Glossary of Terms

Figure (i)	The regions of Thailand	xv
Figure (ii)	<i>Chok</i> as a weaving <i>technique</i>	xvi
Figure (iii)	<i>Chok</i> as a type of <i>textile</i>	xvi
Figure (iv)	<i>Chok</i> as a particular item of <i>clothing</i>	xvi
<b>Chapter 2</b>	<b>Sustainability and Design</b>	
Figure 2.1	The Triple Bottom Line of sustainability	021
Figure 2.2	A Quadruple Bottom Line for sustainable and meaningful design	023
Figure 2.3	The relationship between terms relating to sustainability in this study	031
<b>Chapter 3</b>	<b>Craft in General and in the Context of Sustainability</b>	
Figure 3.1	Two potential directions for craft in a changing world	053
<b>Chapter 4</b>	<b>Crafts in Thailand and a Specific Region for Study</b>	
Figure 4.1	Example of the application of a craft-related word	071
Figure 4.2	The images of Thai silk enterprises, between “tradition” and “modernity”	082
<b>Chapter 6</b>	<b>Research Methodology</b>	
Figure 6.1	Outline of the research methodology	104
Figure 6.2	Data analysis, using simple hand-tools	113
Figure 6.3	Data analysis, using Microsoft Excel	114
Figure 6.4	Weaving communities of the Tai Yuan	117
Figure 6.5	The company running weaving courses and training in Bangkok	119
Figure 6.6	Journeys undertaken for case studies (Chiang Mai and Phrae provinces and Bangkok)	120
Figure 6.7	Data preparation and analysis of the case studies	127
<b>Chapter 8</b>	<b>Findings from the Case Studies</b>	
Figure 8.1	Handloom and <i>chok</i> textiles made using the traditional process	174
Figure 8.2	Handloom and <i>chok</i> textiles made using integrated-techniques	175
Figure 8.3	<i>Chok</i> textiles made using industrial-craft production	176
Figure 8.4	Patterns in <i>chok</i> textiles from Long district	182
Figure 8.5	A vintage <i>sin tin chok</i> , inherited from the mother and with a repair	195
Figure 8.6	Traditional textiles and incremental increase in monetary value over 40 years – example: a hem piece for <i>sin tin chok</i>	199
Figure 8.7	Showcases of handmade products	211

# List of Tables

<b>Chapter 1</b>	<b>Introduction</b>	
Table 1.1	Validation of the research findings	006
<b>Chapter 2</b>	<b>Sustainability and Design</b>	
Table 2.1	Common challenges for sustainable development	014
Table 2.2	The “strategic imperatives” of sustainable development	014
Table 2.3	Required systems for sustainable development	014
Table 2.4	Sustainability and various elements discussed in the literature	019
Table 2.5	The relationship between sustainability and development	020
Table 2.6	Summary of the relationship between sustainability, design and craft	032
Table 2.7	Summary of the gaps identified in sustainability, design and craft	033
Table 2.8	Summary of potential areas of <i>design for sustainability</i>	033
<b>Chapter 3</b>	<b>Craft in General and in the Context of Sustainability</b>	
Table 3.1	Meanings and examples of the use of terms – craft, handicraft	035
Table 3.2	Comprehensive descriptions of craft by scholars	036
Table 3.3	Crafts in critical discourses and thematic terms	041
Table 3.4	Summary of craft classification by business operation	042
Table 3.5	Continents and craft industries: features and contributions	043
Table 3.6	Crafts in manufacturing and industrial economic activities	044
Table 3.7	UNCTAD classification of creative industries	045
Table 3.8	Examples of craft-based design enterprises	061
Table 3.9	Contextual factors of craft-based design enterprises (from six examples)	062
Table 3.10	Craft-based design enterprises and development strategies which are congruent with sustainability (from six examples)	063
Table 3.11	Summary of the relationship between sustainability, design and craft	065
Table 3.12	Summary of the gaps identified in sustainability, design and craft	066
Table 3.13	Summary of potential areas of <i>design for sustainability</i>	067
<b>Chapter 4</b>	<b>Crafts in Thailand and a Specific Region for Study</b>	
Table 4.1	List of publications	068
Table 4.2	Craft terms used in Thai	070
Table 4.3	Major policies in the National Economic and Social Development Plans of Thailand in relation to handicraft production	074
Table 4.4	Themes of Thai silk enterprises and perceptions of their brand images	082
Table 4.5	Classification of crafts in northern Thailand	084
Table 4.6	Summary of the relationship between sustainability, design and craft	090
Table 4.7	Summary of the gaps identified in sustainability, design and craft	091
Table 4.8	Summary of potential areas of <i>design for sustainability</i>	092
<b>Chapter 5</b>	<b>Conclusion from the Key Findings of the Literature Review and Research Questions</b>	
Table 5.1	Key findings relating to the relationship between sustainability, design and craft	094
Table 5.2	Key findings relating to gaps in sustainability, design and craft	095
Table 5.3	Key findings about potential areas of <i>design for sustainability</i>	096
<b>Chapter 6</b>	<b>Research Methodology</b>	
Table 6.1	Informants identified by major role and experience and multiple roles	111
Table 6.2	Three informant groups and key attributes	111

Table 6.3	Number and duration of field visits in case studies	122
Table 6.4	Grouping of the informants in the case studies	124
<b>Chapter 7</b>	<b>Findings from Semi-structured Interviews</b>	
Table 7.1	Analysis of the current state of handicraft production in northern Thailand	130
Table 7.2(a)	Handicraft production in relation to the Triple Bottom Line of Sustainability – when producers expressed uncertainty about the term	136
Table 7.2(b)	Handicraft production in relation to the Triple Bottom Line of Sustainability – when producers were asked Question D (society, the economy and the environment)	137
Table 7.3	Core elements necessary for the viability of handicraft production – classified by themes	142
Table 7.4	Categories of small- and medium-sized enterprises (SMEs) in the context of Thailand	146
Table 7.5	Criteria for the selection of handicrafts with strong potential for development for long-term viability	148
Table 7.6	Three handicrafts with strong potential for development and long-term viability – scores breakdown	149
Table 7.7	Justification for selecting one particular handicraft for in-depth case studies	151
Table 7.8	Market components that have high potential for handicrafts	153
Table 7.9	Roles and experience of the reviewers in Thailand	157
Table 7.10	Areas of expertise and years of experience of the reviewers in India	158
Table 7.11	Summary of research findings from the semi-structured interviews	164
<b>Chapter 8</b>	<b>Findings from the Case Studies</b>	
Table 8.1	Timeline of developments in textile production in Long district (1950–2012)	167
Table 8.2	Textile production in Long district, 1950–1990s	168
Table 8.3	Textile production in Long district, 2000–2012	169
Table 8.4	Feedback on government departments/agents – regarding development projects and common practices	170
Table 8.5	Textile products of Long district	171
Table 8.6	Mindset in business operation	172
Table 8.7	Examples of employment types in textile production in Long district	173
Table 8.8	Production processes	173
Table 8.9	Mechanisms identified as being relevant for transferring knowledge in traditional weaving and providing information about ethnic textiles	184
Table 8.10	Feedback on development projects led by government departments/agents	188
Table 8.11	Development projects led by a non-governmental group – towards <i>product development</i>	189
Table 8.12	Development projects led by a non-governmental group – towards <i>cultural revitalization</i>	190
Table 8.13	Age groups, their purpose in life and location to live in	192
Table 8.14	Annual calendar of agriculture and handicraft production correlated to the local climate	194
Table 8.15	The mindset of people in the textile business	197
Table 8.16	Analysis of production time for <i>sin tin chok</i> in relation to income generation	199
Table 8.17	Examples of production capacity and time required for newly-made products	201
Table 8.18	Weaving courses and special sessions offered by the company	212
Table 8.19	Summary of research findings from the case studies	216
<b>Chapter 9</b>	<b>The Seven Main Research Findings, and Conclusions</b>	
Table 9.1	The benefits of handicraft production (including the weaving of the Tai Yuan ethnic group in northern Thailand) in relation to Walker's Quadruple Bottom Line of Sustainability (2011)	219

Table 9.2	Four critical factors and their various elements affecting the long-term viability of handicraft enterprises in northern Thailand	227
Table 9.3	Four critical factors and levels of attention in the three major data sources	228
Table 9.4	Compatibility of the elements of the four critical factors affecting the long-term viability of handicraft enterprises with the elements in Walker's Quadruple Bottom Line of Sustainability	229
Table 9.5	Three main categories in the supply chain of handwoven textiles	242

## Glossary of Terms

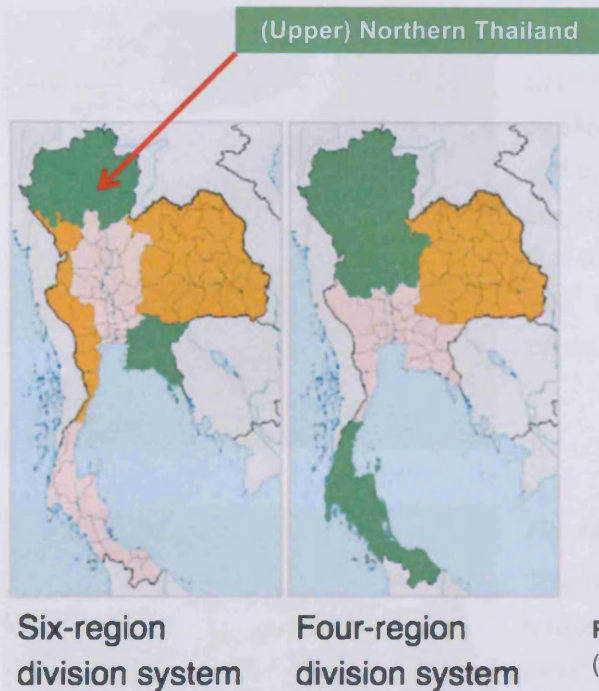


Figure (i) The regions of Thailand  
(Source of the image: Wikipedia, 2014)

There are many ways of identifying the regions of Thailand. In this thesis, “northern Thailand” refers to the nine provinces of Chiang Mai, Chiang Rai, Lampang, Lamphun, Mae Hong Son, Nan, Phayao, Phrae and Uttaradit. It is one of six regions, each of which is characterised by particular *geographical* features, i.e. mountain ranges. Northern Thailand is the highlands. Historically, it constituted the Kingdom of Lanna for more than seven hundred years from the thirteenth century, and developed a unique art and culture (Bowie, 1992; Lannaworld.com, 2006). A four-region system is also used, especially for administrative and political matters purposes. In this case, these nine provinces may be identified as the “upper” part of northern region.

In the case studies of handwoven textiles, *chok* is often mentioned. **Chok** is a word in the dialect used by the ethnic groups of Thailand, including the Tai Yuan. It means to “insert or slip something in and out” (Suchitta, 1989, p.97). *Chok* can mean differing things depending on the way it is used and its applications to the particular subjects. English would require a long phrase or a sentence to capture the full meaning, which could confuse readers or

prevent them from understanding the original context of handwoven textiles. The researcher has therefore identified these *chok* terms and clarified the meanings as follows.



**Figure (ii) *Chok* as a weaving technique**

*Chok* means to weave and create “patterns ... by slipping [weft] threads of different colours in and out on the loom” (Suchitta, 1989, p.97). In English translations, *chok* refers to weaving that employs a “discontinuous supplementary weft” technique (McIntosh, 2012, p.6). In this thesis, this is referred to as *chok weaving*.



**Figure (iii) *Chok* as a type of textile**

This type of textile is “made by slipping [weft] threads of different colours in and out on the loom” (Suchitta, 1989, p.97) (known as “discontinuous supplementary weft” technique or “*chok*”) to create a textile with intricate pattern in a particular size. In this thesis, this is referred to as *chok textiles*.



**Figure (iv) *Chok* as a particular item of clothing**

A tube skirt is a traditional garment which is called *sin*, an old Thai word. A *sin* that is decorated with *chok* textiles at the bottom is called a *sin tin chok*. *Tin* is an old Thai word for “base or foot” (Suchitta, 1989, p.97). In this thesis, this is referred to as *sin tin chok*.

# Chapter One

## Introduction

This chapter gives an overview to the background to this research (Section 1.0), the elements of this research (Section 1.1), validation of the research findings (Section 1.2), and the structure of this thesis (Section 1.3).

### **1.0 BACKGROUND TO THIS RESEARCH**

---

#### **1.0.1 Aspirations that led the researcher to doctoral study**

Previously, the researcher was trained as an industrial designer with specific knowledge of ceramic and packaging designs, and worked as a designer for private companies for 10 years. Areas of expertise included graphics, packaging, branding, and corporate and retail identity designs. In 2009, the researcher had a change in career, moving away from being a professional designer, and becoming a teacher in the Animation Department of the College of Arts, Media and Technology (CAMT), Chiang Mai University (CMU), Thailand. There, the researcher was looking for an opportunity which would allow:

- (i) Acquisition of the knowledge and skills necessary for working in higher education as a teacher with a long-term future;
- (ii) An opportunity to disseminate the empirical knowledge gained from work-experience in design for business;
- (iii) The retention and development of design skills and design thinking.

These aspirations aligned with the demands of Chiang Mai University and could be fulfilled through the process of doctoral study. So, a decision to pursue further study for a doctorate in design was made and an initial research proposal was developed.

#### **1.0.2 Inspirations for research into craft and *design for sustainability***

The initial research proposal was inspired by the researcher's interest in the handicrafts of Thailand and concern about the decline in their production. Having lived in Chiang Mai, a

province in northern Thailand between 2007 and 2010, the researcher found that local handicrafts were not aligned with market demand and seemed not to offer a viable income to craftspeople. When craftspeople could not earn enough to make a living, they usually left handicraft production for other jobs. At the same time, buyers commented that local handicrafts were seen as old-fashioned, impractical, of poor quality and not meeting customers' preferences. This raised a question: "what can design do to help ensure the continuation of handicraft production and also improve its economic viability for craftspeople?" The researcher was particularly interested in the meaning of sustainability and its relationship to craft and design. Additionally, there was advice from CAMT for the researcher to undertake research into handicraft in relation to community development and enterprise.

## 1.1 THE ELEMENTS OF THIS RESEARCH

---

The research areas comprised sustainability, design and craft which are discussed in both an international context and in a local context specific to handicrafts in Thailand. It focused on an in-depth investigation of the relationship between sustainability, design and craft, and the identification of the potential of *design for sustainability* – using the handicrafts of northern Thailand as the location for field research.

**The research aims were to:**

- Develop an *in-depth understanding* of the *relationship* between sustainability, design and craft among the various stakeholders engaging in the handicrafts sector as producers, supporters (e.g. government agents, educational institutions, the private sector, associations and NGOs), and buyers;
- Provide *examples* of handicrafts along with *criteria* by which they are compatible with *design for sustainability* (according to Walker's Quadruple Bottom Line of Sustainability, comprising: personal meaning, social responsibility, environmental care and economic viability (Walker, 2011, p.190));
- Identify *potential areas* in which design can contribute to the long-term viability of the handicrafts sector, and simultaneously reinforce the implementation of sustainability, i.e. Walker's Quadruple Bottom Line of Sustainability.



**The research methodology** involved data collection from a literature review, semi-structured interviews with informants in the handicrafts sector and case studies from weaving communities and enterprises mainly in northern Thailand. A mixed-methods approach (using both qualitative and quantitative data) was employed for data collection and analysis. However, much of the data collected and presented in this thesis is qualitative because it seeks to develop an in-depth understanding of the relationship between sustainability, design and craft.

**The location for field research** was a particular area of northern Thailand. This was based on the initial findings from the literature review. This region had the strongest potential for handmade production, with a high density of small- and medium-sized enterprises, and was an area where handicraft production was deemed to make contributions in many ways that align with sustainability. Several product categories were identified as having strong market potential, including furniture, wickerwork, home decoration, carpets, gifts, toys, celebration items, garments, textiles, yarn products and jewellery. Also, areas for improvements in which design could get involved were revealed, for example (i) product design and development, (ii) design for marketing and brand creation, (iii) design in production development and (iv) design in skills training.

**Main research questions** were developed as guidelines for the field research.

1. What are the relationships between the handicraft production of northern Thailand and sustainability?
2. Which handicrafts of northern Thailand have potential in relation to *design for sustainability*? And what are the selection criteria for these handicrafts?
3. What are potential areas of *design for sustainability* among the handicraft enterprises of northern Thailand?
4. How can research into *design for sustainability* be applied effectively to a particular area of handicraft enterprises in northern Thailand?

**Data collection** from the field research included:

- *Semi-structured interviews* with 26 informants, including 10 producers, 11 supporters (people who are directly or indirectly associated with the handicrafts sector), and 5 buyers;
- *Case studies* in weaving communities and textile enterprises in (i) Long district (Phrae province) and (ii) Mae Chaem district (Chiang Mai province) as main cases and (iii) a company running weaving courses and training in Bangkok as a supplementary case.

**Seven main research findings** are identified from this research, as follows.

1. Handicraft production (including the weaving of the Tai Yuan ethnic group in northern Thailand) is compatible with all the elements in Walker's Quadruple Bottom Line of Sustainability (personal meaning, social responsibility, environmental care and economic viability).
2. Three handicrafts were found to have strong potential for *design for sustainability*, including textiles, furniture and jewellery. This is based on four critical factors affecting the long-term viability of handicraft enterprises, namely: production capacity, product viability, market feasibility and legislation.
3. There are four areas of *design for sustainability* that can ensure the long-term viability of handicraft communities and enterprises: (i) product design and development, (ii) design for marketing and sales, (iii) production development and (iv) knowledge transfer and knowledge development.
4. Weaving courses and training are key mechanisms for transferring textile knowledge. Yet these are not sufficiently available, especially to the younger generation.
5. Developments in the handicraft communities lead in one main direction, namely towards the revitalization, preservation and commercialization of handicrafts. It is crucial to explore directions that can better connect handicrafts with the younger generation and enable producers to adopt a more entrepreneurial approach.
6. *Chok* textiles are available at varying prices and quality in the market. Yet information about the product quality is understated and undifferentiated. More adequate information about the product quality (i.e. production techniques and processes) as

well as about the unique identity and cultural heritage, ethical production and fair trade, is required to stimulate purchasing decisions.

7. The supply chain of handwoven textiles in this region falls into three main categories: stakeholders, producers' service areas and trade channels.

## **1.2 VALIDATION OF THE RESEARCH FINDINGS**

---

Validation of the research findings was undertaken over the course of this study to check the accuracy and quality of information with informants and peer reviewers and to elicit feedback and recommendations. During the data collection in the field, some information collected was validated with the informants to clarify some research issues and ensure the accuracy of information. After the data collection and analysis, aspects of the research findings were validated with peer reviewers, including: those with experience in the fields of craft, design and manufacturing (as the main group); and others in the fields for which "*craft and design for sustainability*" may be relevant, such as indigenous languages, knowledge management and cultural history. Peer feedback was sought through three channels, including (i) research papers and oral presentations at international conferences, (ii) visualizations of the research findings and group discussions (Appendix E) and (iii) a poster presentation and group discussion (Appendix F). Details of the validation with peer reviewers are summarized below.

**Table 1.1 Validation of the research findings**

Subject title	Venue	Number of reviewers	Thesis sections
<b>Research papers and oral presentation at international conferences</b>			
<u>2012</u> "An overview of the issues facing the craft industry and the potential for design, with a case study in upper northern Thailand"	The DRS <sup>1</sup> 2012 Bangkok Conference at Chulalongkorn University, Bangkok, Thailand	Four reviewers (double-blind peer review)  Approximately fifteen attendees	Resulting from the Literature review 4.3 Problem identification 4.4 Northern Thailand – a specific region for study 4.5 Investigation into handicrafts in northern Thailand
<u>2013</u> "Directions for design contributions to the sustainable development of the handicrafts sector in northern Thailand"	The 5th IASDR <sup>2</sup> 2013 Tokyo, at the Shibaura Institute of Technology, Tokyo, Japan	Two reviewers (double-blind peer review)  Approximately fifteen attendees	4.3 – as above 4.4 – as above 7.3 – see below
<b>Visualizations of information and group discussions</b>			
<u>2014</u> Framework for handicraft enterprises in northern Thailand in relation to <i>design for sustainability</i>	Thailand – in Chiang Mai province and Bangkok	Eight reviewers <sup>3</sup> in total	Resulting from the semi-structured interviews
	India – in these locations: In Jaipur - Indian Institute of Crafts and Design (IICD) - Institute of Development Studies (IDS) In Ahmedabad - National Institute of Design (NID) - Craftroots Organization	Eight scholars <sup>4</sup> from various institutions  A group of nineteen undergraduate students at the IICD	7.1 The current situation of the handicrafts sector of northern Thailand 7.2 The perspectives of people involved in the handicrafts sector on sustainability 7.3 The supply chain of the handicrafts of northern Thailand, handicrafts with strong potential and directions for development
<b>A poster presentation and group discussion</b>			
<u>2015</u> Main research findings	A workshop of the British Council researcher links, namely "Documenting and preserving indigenous languages: principles, practices and tools", at Mahidol University, Bangkok, Thailand	Fifteen researchers each from Thailand and the UK	Research methodology Main research findings, resulting from three sources 9.1 Compatibility between handicraft production and sustainability 9.2 Three handicrafts that have strong potential for <i>design for sustainability</i> and four critical factors 9.3 Four areas of <i>design for sustainability</i> in handicraft communities and enterprises

<sup>1</sup> **DRS:** Design Research Society.

<sup>2</sup> **IASDR:** International Association of Societies of Design Research.

<sup>3</sup> **The reviewers** in Thailand have more than 10 years of experience in the fields related to craft, design and manufacturing. Their roles include education and research, business management and business consultancy.

<sup>4</sup> **The scholars** in India have 10 to 20 years of experience in the fields of craft, design, textiles, knowledge management, cultural history and enterprise.

Revisions were made to the research findings on the basis of the rich feedback and recommendations received. The revision process involved (i) further analysis and revision of some details of the research findings and (ii) restructuring and rewriting some aspects of the research findings to fit well within this thesis. These changes resulted in greater clarity and coherence in the research findings.

### 1.2.1 Publications resulting from this research

Two academic papers were published in conference proceedings as listed below.

Chudasri, D., Walker, S. and Evans, M. (2013) "Directions for design contributions to the sustainable development of the handicrafts sector in northern Thailand". In: *Consilience and Innovation in Design: Proceedings and Program, The 5th IASDR 2013 Tokyo*, Shibaura Institute of Technology, Tokyo, Vol.2, pp.585–596.

Chudasri, D., Walker, S. and Evans, M. (2012) "An overview of the issues facing the craft industry and the potential for design: with a case study in upper northern Thailand". In: *Design Research Society 2012: Bangkok, Conference Proceedings*, Chulalongkorn University, Bangkok, Vol.1, pp.314–326.

## 1.3 STRUCTURE OF THIS THESIS

---

This thesis comprises nine chapters.

**Chapter 2** provides an overview of sustainability as an overarching principle which informs design. It begins with the emergence and evolution of sustainability (Section 2.1), followed by various conceptions and contemporary understandings of sustainability (Section 2.2). Next, design in relation to sustainability (Section 2.3) is discussed. Lastly, the key findings are summarised (Section 2.4).

**Chapter 3** presents a review of the literature on craft in general and in the context of sustainability. It begins with craft in general (Section 3.1), including an explanation (Section 3.1.1) and classifications (Section 3.1.2) of crafts. This is followed by a consideration of craft and its historical development in the context of sustainability (Section 3.2). A brief discussion of the relationship between craft and *design for sustainability* (Section 3.3) is given together

with six examples of craft-based design enterprises for sustainability (Section 3.3.2) from various countries. Lastly, the key findings are summarised (Section 3.4).

**Chapter 4** presents crafts in Thailand and identifies a specific region for in-depth study. It begins with clarification of the meaning of “craft” and “handicraft” in the context of Thailand (Section 4.1). This is followed by a discussion of the development of handicraft production from the 19<sup>th</sup> century to the present, including various contextual factors that impact on handicraft production (Section 4.2). Next, research problems are identified (Section 4.3), and northern Thailand is proposed with a rationale for choosing it as the specific region for in-depth study (Section 4.4). Then, an investigation into handicrafts in northern Thailand is reported (Section 4.5), including a classification of crafts (Section 4.5.1), and a description of the challenges and opportunities for design (Section 4.5.2). Lastly, the key findings are summarised (Section 4.6).

**Chapter 5** compares all the key findings from the literature review (Chapters 2–4) in consideration of three subjects analysed, including (i) the relationships and (ii) gaps between sustainability, design and craft and also (iii) potential areas relating to *design for sustainability*. Findings from these cross-chapter analyses are identified (Section 5.1) and discussed in order to draw conclusions from the findings of the literature review (Section 5.2). The research aims and research questions are raised as guidelines for field research (Section 5.3).

**Chapter 6** explains how the research was carried out and why it was done in that way. The discussion of the research methodology covers the four years (2011–2014) of research into the relationship between sustainability, design and craft. It begins with an introduction to the research methodology (Section 6.0), including the research aims, research activities and the organization and validation of research findings. Then it discusses details of a literature review (Section 6.1), semi-structured interviews (Section 6.2) and case studies (Section 6.3), an analysis of all the key findings from the three major data sources (Section 6.4), and a summary of the chapter (Section 6.5).

**Chapter 7** discusses the findings from the semi-structured interviews conducted with 26 informants involved in the handicrafts sector of northern Thailand as producers, supporters or buyers. This yielded three sets of findings: the current situation of the handicrafts sector

(Section 7.1), the perspectives of people in the handicrafts sector towards sustainability (Section 7.2) and the supply chain of handicrafts, including handicrafts with strong potential, potential markets and directions for development (Section 7.3). The validation of these findings is also discussed (Section 7.4). Lastly, a list of these research findings is provided (Section 7.5).

**Chapter 8** discusses the findings from the case studies from three weaving communities and textile enterprises. Each case is discussed separately. Cases 1 and 2 are about weaving communities and textile enterprises located in northern Thailand: Long district (Phrae province) (Section 8.1) and Mae Chaem district (Chiang Mai province) (Section 8.2). Case 3 discusses a company running weaving courses and training in Bangkok (Section 8.3).

**Chapter 9** discusses the seven main research findings (Sections 9.1–9.7) drawn from all the key findings from the three major data sources. Then, these main findings are briefly recapitulated (Section 9.8). Contributions to knowledge and potential beneficiaries are discussed (Section 9.9), as well as the limitations of the research (Section 9.10). It ends with concluding remarks (Section 9.11).

# Chapter Two

## Sustainability and Design

### 2.0 INTRODUCTION

---

This chapter provides an overview of sustainability as an overarching principle which informs design. It begins with the emergence and evolution of sustainability (Section 2.1), followed by various conceptions and contemporary understandings of sustainability (Section 2.2). Next, design in relation to sustainability (Section 2.3) is discussed along with its role in moving towards sustainable activities for a sustainable society. Finally, the key findings are summarised (Section 2.4).

### 2.1 THE EMERGENCE AND EVOLUTION OF SUSTAINABILITY

---

The terms “sustainability” and “sustainable development” are relatively recent concepts that emerged from environmental and social concerns dating back to the 1960s (Bhamra and Lofthouse, 2007, p.9). The evolution of sustainability has been described by Elkington (1997, pp.41–66) as a series of three pressure waves that began in the 1960s and which have consequential impacts to this day (SustainAbility, 2006 cited in Bhamra and Lofthouse, 2007, p.1). These three pressure waves of sustainable development include:

- The first wave of environmentalism (1960s–1970s) (Elkington, 1997, p.46);
- The second wave of “going green” (1980s–1990s) (Elkington, 1997, p.56);
- The third wave of sustainability (from 1999) (Elkington, 1997, p.61).

#### 2.1.1 The first pressure wave of environmentalism or limits (1960s–1970s)

The first pressure wave of *environmentalism* is also called *limits* (Elkington, 2004, p.8). It began as movements in the 1960s and 1970s (Bhamra and Lofthouse, 2007, p.1), especially among the younger generation in North America and Europe (Walker, 2006, p.20), which raised concerns about environmental and social issues. These movements predominantly took the form of campaigns, extensive protests, publications and the establishment of non-



profit organizations and Green groups (Walker, 2006, p.20; Bhamra and Lofthouse, 2007, pp.1, 9). This wave peaked from 1969 to 1973 (Elkington, 2004, p.8). It led to an understanding that demand for natural resources and the impact this has on the environment has to be limited; some environmental legislation was passed (Elkington, 2004, p.7) with a focus on driving change via government policy and regulation (Bhamra and Lofthouse, 2007, p.1).

- The 1960s was a time when Western countries faced growing unrest about multiple concerns, e.g. protests against possible nuclear war and its destructive consequences (death, environmental damage) through peace campaigns (Walker, 2006, p.20). The environmental movement was heralded by a publication by Rachel Carson, *Silent Spring*,<sup>1</sup> in 1962 (Elkington, 1997, p.46). Simultaneously, social issues and human rights were addressed, i.e. social equality including civil rights, women's and gay rights (Walker, 2006, p.21).
- In the 1970s, ideas of social justice and environmental stewardship became an acceptable means of framing society, eventually leading to the emergence of the term "sustainable development" (Walker, 2006, p.16). In 1972, the concept of sustainable development was mentioned at the United Nations World Summit on the Human Environment in Stockholm, Sweden; nevertheless, a number of nations could not agree upon a concept of sustainable development, i.e. the rich and poor nations (Charoenmuang, 2007, p. 150). Influential publications during this period included: "Design for the Real World" by Victor Papanek in 1971 (Walker, 2006, p.22; Bhamra and Lofthouse, 2007, p.2) and "Limits to Growth" by Donella Meadows et al. in 1972 (Elkington, 1997, pp.46, 51; Scruton, 2012, p.381).
  - *Design for the Real World* (Papanek, 1971) called for design to meet real needs rather than creating wants, i.e. "conventional" product design (Walker, 2006, p.22), given the fact that 80 per cent of products were

---

<sup>1</sup> **Silent Spring:** The publication drew attention to human activities that were threatening the natural environment (Walker, 2006, p.20) i.e. the use of the insecticide DDT and its destructive impact on wildlife (Bhamra and Lofthouse, 2007, p.9).

discarded after a single use and 99 per cent of materials used were discarded in the first six weeks (Shot in the Dark, 2000 cited in Bhamra and Lofthouse, 2007, p.2). Design and manufacture were expected to be responsible for their acts of creating wasteful products and customer dissatisfaction (Bhamra and Lofthouse, 2007, p.2).

- *Limits to Growth* (Meadows, Jorgen and Meadows, 1972) reported that “global ecological constraints (related to resource use and emissions) would have significant influence on global developments in the twenty-first century” and discussed limits to exponential growth and the overshooting of technology and markets in a finite world. It proposed “transitions to a sustainable system” and “tools for the transition to sustainability” (Meadows, Jorgen and Meadows, 1972, p.x).
- During the 1960s and 1970s, there were critiques<sup>2</sup> of modern and unsustainable development, which brought about the concept of *design for sustainability* (Bhamra and Lofthouse, 2007, p.3). These were published in response to the environmental and social reforms of the 1960s. Publications that provided principles and guidelines for the alternative ways of designing, i.e. industrial and product design, include *Design for the Real World – Human Ecology and Social Change* (Papanek, 1971), *Small is Beautiful – Economics as if People Mattered* (Schumacher, 1973) and ideas for the effective use of technology (Fuller, 1930s to 1970s cited in Walker, 2006, p.22).

### **2.1.2 The second wave of green pressure (1980s–1990s)**

The second wave was set off in the 1980s and early 1990s by a range of economic crises (SustainAbility, 2006 cited in Bhamra and Lofthouse, 2007, p.1) together with growing awareness of environmental and social issues (Walker, 2006, p.23). This wave was driven by a wide range of issues, particularly ozone depletion, global warming, rainforest destruction, climate change, biodiversity (Elkington, 2004, p.9), debt crises, the inequality between rich

---

<sup>2</sup> Critics who argued for the concept of *design for sustainability* include: Fuller (1930s to 1970s), Packard (1963), Papanek (1971), Schumacher (1973), Bonsiepe (1973) (cited in Walker, 2006, p.22; Bhamra and Lofthouse, 2007, p.3).

and poor countries, sweatshop labour, the role of business and its relationship to environmental degradation and social injustice (Walker, 2006, p.23), food shortages, disease and poverty (World Commission on Environment and Development, 1987). This awareness led to a movement of green consumerism (Elkington, 2004, p.9; Bhamra and Lofthouse, 2007, p.4).

This second wave peaked between 1988 and 1991 (Elkington, 2004, p.9) as a result of the publication of "Our Common Future", also known as the Brundtland Report, by the World Commission on Environmental and Development in 1987 (Elkington, 2004, p.9; Scruton, 2012, p.381). Not everybody was persuaded by the idea of "Limits to Growth" (1972); the Brundtland Report (1987) was evidence of this (Scruton, 2012, p.381). The World Commission on Environment and Development<sup>3</sup> (1987, p.ix) was called upon by the United Nations to formulate "a global agenda for change".

- The Brundtland Report proposed "sustainable development", with an aim to promote harmony among human beings and between humanity and nature (World Commission on Environment and Development, 1987, p.65). It recommended ways to deal effectively with environmental problems at different stages of economic and social development that involved interrelationships between people, resources, the environment and development by countries around the globe (World Commission on Environment and Development, 1987, p.ix). The World Commission on Environment and Development (1987) presented common challenges (p.v) with guidelines for long-term strategies (p.49) and required systems for achieving sustainable development (p.65) by the year 2000 and beyond (p.ix) as summarised in the tables below.

---

<sup>3</sup> **The World Commission on Environment and Development** operated under the chairmanship of Norwegian Prime Minister Gro Harlem Brundtland (Scruton, 2012, p.381).

**Table 2.1 Common challenges for sustainable development**

(Source: World Commission on Environment and Development, 1987, p.v)

The Brundtland Report presented six themes or “common challenges”, which human beings are facing, as follows:

- *“Population and human resources” (pp.95–117);*
- *“Food security: sustaining the potential” (pp.118–146);*
- *“Species and ecosystems: resources for development” (pp.147–167);*
- *“Energy: choices for environment and development” (pp.168–205);*
- *“Industry: producing more with less” (pp.206–234);*
- *“The urban challenge” (pp.235–258).*

**Table 2.2 The “strategic imperatives” of sustainable development**

(Source: World Commission on Environment and Development, 1987, p.49)

*“The world must quickly design strategies that will allow nations to move from their present, often destructive, processes of growth and development onto sustainable development paths. This will require policy changes in all countries, with respect both to their own development and to their impacts on other nations’ development possibilities.”*

*“Critical objectives for environment and development policies that follow from the concept of sustainable development include:*

- *Reviving growth;*
- *Changing the quality of growth;*
- *Meeting essential needs for jobs, food, energy, water and sanitation;*
- *Ensuring a sustainable level of population;*
- *Conserving and enhancing the resource base;*
- *Reorienting technology and managing risk; and*
- *Merging environment and economics in decision making.”*

**Table 2.3 Required systems for sustainable development**

(Source: World Commission on Environment and Development, 1987, p.65)

*“...The pursuit of sustainable development requires:*

- *A political system that secures effective citizen participation in decision making,*
- *An economic system that is able to generate surpluses and technical knowledge on a self-reliant and sustained basis,*
- *A social system that provides for solutions for the tensions arising from disharmonious development,*
- *A production system that respects the obligation to preserve the ecological base for development,*
- *A technological system that can search continuously for new solutions,*
- *An international system that fosters sustainable patterns of trade and finance, and*
- *An administrative system that is flexible and has the capacity for self-correction.”*

Coincidentally with green consumerism, there was a call for design to make radical changes too (Bhamra and Lofthouse, 2007, p.4). Towards the end of the 1990s “*design for*

*sustainability*” became widespread and designers were motivated and interested in improving environmental and social impacts through product development; yet this was rarely addressed in design briefs (Bhamra and Lofthouse, 2007, p.4). There was *little* evidence of *holistic* thinking about “*design for sustainability*” in industry or product development (Bhamra and Lofthouse, 2007, p.4). Nevertheless, critiques<sup>4</sup> noted that commercial industry and business could be primary mechanisms for achieving a more sustainable future (Walker, 2006, p.23).

The second wave brought a wider realization that development processes needed to become more sustainable in many ways, i.e. via production technologies and products; business's response began to be more competitive and business corporations began to take part (Elkington, 2004, p.7). This led to legislation on environmental, health and safety standards, including concepts for auditing and reporting on business corporations (Bhamra and Lofthouse, 2007, p.1).

### **2.1.3 The third pressure wave of sustainability (from 1999 until the present day)**

The third wave of sustainability began in 1999 (Elkington, 2004, p.9), driven by concerns about economic and social issues related to globalisation (Elkington, 1997, p.62). Protests against institutions and groups<sup>5</sup> associated with world trade, banking and investment funds, industrial production and economics began in 1999 and continued until early in the twenty-first century (Elkington, 2004, p.9; Walker, 2006, p.23). Alongside these protests there have been demonstrations worldwide against the US-led war in Iraq for oil resources, the gap between rich and poor countries and a serious call for greater social justice for poorer countries (Walker, 2006, pp.23–24).

People (i.e. in the political and business sectors) have realized the relevance of environmental responsibility, social equity and human rights and acted upon legislation for more sustainable ways of living e.g. in relation to energy use and the consumption and depletion of natural resources (Walker, 2006, p.24). Not least, there have been concerns about whether the economic models for growth developed before 1945 are sustainable for the twenty-first

---

<sup>4</sup> **Critiques:** The Ecology of Commerce (Paul Hawken, 1993); Greening the North (Wolfgang Sachs and colleagues, 1998); No Logo (Naomi Klein, 2000) (cited in Walker, 2006, p.23).

<sup>5</sup> **Institutions and groups:** e.g. the World Trade Organization (WTO), the World Bank, the International Monetary Fund (IMF), the Group of 8 industrialised countries (G8) and the World Economic Forum (Elkington, 2004, p.9).

century; this needs rethinking in terms of the relationship between [global] production for economic growth and the possibly exploitation of localities i.e. labour and natural resources – through employment (Elkington, 1997, p.65).

For industry and commerce, the sustainable development agenda has become a competitive and strategic issue (Elkington, 1997, p.41) which requires changes in:

- The operation of globalization processes, corporations, government and civil society (Elkington, 2004, p.7);
- Current ideologies about production, consumption and decision-making (Van der Bergh and Nijkamp, 1991 cited in Cadman, 2009, p.67).

This changing understanding has affected the product design and manufacturing sectors in many ways, e.g. the imposition of international standards and legislation to control air emissions, water pollution and the discarding of toxic and wasteful materials (Walker, 2006, p.24). Issues of environmentally and socially responsible design, which were not specifically addressed in the past, are now recognised in design education and training with related initiatives, e.g. sustainable design awards, centres for sustainable design, courses and tools for raising awareness in young designers (Bhamra and Lofthouse, 2007, p.4). Although a new area, research in the field of *design for sustainability* has become established, covering issues such as the implementation of legislation, eco-innovations, corporate social responsibility, product service systems, eco-redesign, consideration of the impact of user behaviour, design for disassembly and reverse manufacturing (Bhamra and Lofthouse, 2007, p.4).

## **2.2 VARIOUS CONCEPTIONS AND CONTEMPORARY UNDERSTANDINGS OF SUSTAINABILITY**

---

This section presents: the Brundtland definition of sustainable development and criticism of it, various conceptions of sustainability terms, followed by the rethinking of the relationship between sustainability and development and our contemporary understandings of sustainability.

### 2.2.1 The Brundtland definition of sustainable development and criticisms of it

The Brundtland Report popularised the term “sustainable development” (Walker, 2006, p.15; Bhamra and Lofthouse, 2007, p.11), resulting in the use of the term in the political mainstream (Elkington, 2004, p.9). In the Brundtland Report, the terms “sustainability” and “sustainable development” are used interchangeably and are described as follows:

*“No single blueprint of sustainability will be found, as economic and social systems and ecological conditions differ widely among countries. Each nation will have to work out its own concrete policy implications. Yet irrespective of these differences, sustainable development should be seen as a global objective.” (World Commission on Environment and Development, 1987, p.40)*

The Brundtland Report has been widely quoted, especially its definition of term “sustainable development” (Cadman, 2009, p.35) as follows:

*“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” (World Commission on Environment and Development, 1987, p.43)*

Nevertheless, the Brundtland definition has been criticised by numerous authors for being vague or even meaningless (cited in Dresner, 2002, p.69), especially the term “future generations” (cited in Cadman, 2009, p.36). Whereas some have noted the importance of vagueness and agreed that having no central or precise description “does not mean that there is no meaning at all” (cited in Dresner, 2002, p.69). Others have criticised the heterogeneous possible meanings of the term, as this could lead to misunderstandings. These meanings include:

- “The necessary conditions to live sustainably (a goal or state of being);
- “The socio-political means of achieving a goal (a planning process);
- “Particular strategies to solve present problems (piecemeal solutions)” (Wackernagel and Rees, 1996a, p.33 cited in Cadman, 2009, p.31).

There has been criticism that the report was written “to secure approval from environmental groups and business simultaneously and proposed ambiguous solutions that are inconsistent with its own definition” (cited in Cadman, 2009, p.36). In response to the idea of “Limits to Growth”, this report argued that growth would be necessary and presented controversial issues about the exploitation of resources and economic growth in the alternative terms of sustainability and development, called “sustainable development” (Scruton, 2012, p.381). Donella Meadows, the author of “The Limits to Growth” (cited in Dresner, 2002, p.72) disagrees with the term “sustainable development” (or “growth”) and insists on the concept of sustainability.

### **2.2.2 Various conceptions of sustainability terms**

The lack of clarity of sustainability terms has resulted in various conceptions<sup>6</sup> with over 80 alternate definitions and meanings (Mebrattu, 1998; Beatley and Manning cited in Cadman, 2009, p.30) and various approaches to attaining sustainability (David Orr cited in Van der Ryn and Cowan, 1965, p.20). All these share an awareness of the global environmental crisis, yet they embody very different visions of a sustainable society (David Orr cited in Van der Ryn and Cowan, 1965, p.20).

There are various elements involved in the context of sustainability (Huczynski and Buchanan, 2004 cited in Cadman, 2009, p.40). However, only three elements (environment, economy and society) are widely discussed within the reviewed literature (Munasinghe and Shearer, 1995; Minken, 2002; Rassafi et al., 2006 – cited in Cadman, 2009, p.40). Nevertheless, other themes have emerged and are identified for further research in the table below.

---

<sup>6</sup> **Various conceptions of sustainability and sustainable development** are e.g.: “a possible solution to the perceived conflict between growth and conservation” (Van der Bergh and Nijkamp, 1991 cited in Cadman, 2009, p.67); “a solution for a wide range of problems” (Elkington, 1997, p.20); “a process ... [to] move towards sustainability” (Bhamra and Lofthouse, 2007, p.14).



**Table 2.4 Sustainability and various elements discussed in the literature**

(Source: Cadman, 2009, p.40)

Analytical elements	Most discussed elements	Elements for further research
<ul style="list-style-type: none"> <li>• Political</li> <li>• Environmental</li> <li>• Social</li> <li>• Technological</li> <li>• Legal</li> <li>• Economic</li> </ul> <p>(Huczynski and Buchanan, 2004 cited in Cadman, 2009, p.40)</p>	<ul style="list-style-type: none"> <li>• Environmental</li> <li>• Economic</li> <li>• Social</li> </ul> <p>(Munasinghe and Shearer, 1995; Minken, 2002; Rassafi et al., 2006 – cited in Cadman, 2009, p.40)</p>	<ul style="list-style-type: none"> <li>• Technological factors</li> <li>• Poverty, ecological justice and intra-generational equity</li> <li>• Future generations and intergenerational equity</li> <li>• Ecosystems, biodiversity, carrying capacity, ecological footprint and population</li> </ul> <p>(Cadman, 2009, p.40).</p>

The terms “sustainability”, “sustainable development” or variations thereof have been used in a range of literature with various nuances of meaning and this has led to confusion around the context of sustainability (Cadman, 2009, p.29). People usually believe that they understand what sustainability means, yet they define it many ways, which is problematic (Elkinton, 1997, p.viii).

The proliferation of sustainability terms<sup>7</sup> and definitions based on the content of the Brundtland Report does not make a progressive contribution towards attaining a sustainable society; in fact this can exacerbate arguments between groups, e.g. environmentalists and enterprises (Scruton, 2012, p.382). What is more important than defining things is to understand (Nitin Desai cited in Dresner, 2002, p.70) the meaning (content) behind the *label* of the concept itself (Ahmed and McQuaid, 2005 cited in Cadman, 2009, p.38) and also to describe “development” (Nitin Desai cited in Dresner, 2002, p.70).

### 2.2.3 Rethinking the relationship between sustainability and development

Cadman (2009, p.33) reported three different conceptions of the relationship between sustainability and development that were developed by Gudmundsson and Hojer (1996) as follows:

<sup>7</sup> **Sustainability Terms**, especially those presented as dichotomous ideas, are for example: “weak” and “strong” sustainability; “deep” and “shallow” sustainability (cited in Scruton, 2012, p.382); “technological” and “ecological” sustainability (David Orr cited in Van der Ryn and Cowan, 1965, p.20).

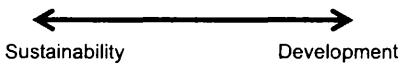
**Table 2.5 The relationship between sustainability and development**

(Source: Cadman, 2009, pp.33–35 based on Gudmundsson and Hojer, 1996, p.272, reproduced as per the presentation of Cadman)



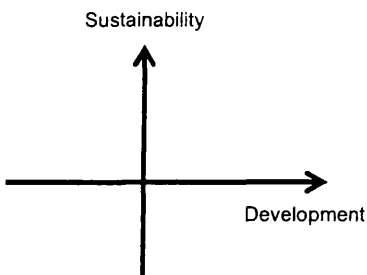
***“Single Directional Concept of Sustainable Development”***

*“This conception focuses on maximising economic growth over time and suggests that development and economic growth can be sustained indefinitely.”*



***“Dichotomous Concept of Sustainable Development”***

*“This notion reflects a contradiction in terms; sustainability is seen as sustaining the status quo, whereas development implies growth, expansion or change.”*



***“Multi-directional Concept of Sustainable Development”***

*“This concept shows that sustainable development is a dynamic system comprising sustainability and development in different dimensions.”*

---

Comparing the three different conceptions, it is concluded that the notion of the relationship between sustainability and development as a multi-directional and dynamic system would lead to attainable action for sustainability that deals with multiple contextual factors e.g. environment, society and economy (Cadman, 2009, pp.34–35). Sustainability is embedded in processes that have occurred over a long period of time in particular places (Van der Ryn and Cowan, 1965, p.85) and that can provide the basis for development in various elements (Cadman, 2009, p.34).

A conception which integrates sustainability and development as a uni-directional approach, focusing on exponential growth of production and economy, is something which cannot be sustained in the long term (Cadman, 2009, p.34). The dichotomous conception between sustaining and developing can create tensions among various groups; these competing

perspectives are impractical for encouraging the sustainable future that requires collaboration among various groups to deal with a series of divergent problems (Schumacher, 1977, pp.120–130 cited in Orr, 2003; Cadman, 2009, p.34).

## 2.2.4 Our contemporary understanding of sustainability

This section presents the widely known models of sustainability, the first of which is known as the *Triple Bottom Line* (3BL). This is followed by a more comprehensive model, known as the *Quadruple Bottom Line* (4BL).

- **The Triple Bottom Line (3BL) – a widely known model of sustainability**

Sustainability is commonly expressed as involving the elements of economic prosperity, environment quality and social justice, known as the Triple Bottom Line (3BL) (Elkington, 1997, p.70). It was initiated as an approach to drive business corporations towards sustainability (Elkington, 1997, p.70) and is also known as “people, planet and profits” (3Ps) (Elkington, 2004, p.2; Bhamra and Lofthouse, 2007, p.15; The Economist, 2009).

**Figure 2.1 The Triple Bottom Line of sustainability**

(Source: Reproduced as per the original in Walker, 2011b based on Elkington, 1998)



Nevertheless, the idea of the Triple Bottom Line (3BL) continues to be disputed in many ways. The Economist (2009) pointed out that these three elements (planet, people and profit), by

nature, represent different forms of value; profit is commonly discussed in terms of cash, while planet and people are discussed in other ways, and so assessing these elements together can be problematic. Furthermore, identifying three elements within sustainability would not be sufficient (Walker, 2006, p.27) and could lead to unrealistic courses of actions to achieve sustainability (Walker, 2006, p.17). Yet this does not mean that sustainability is less important (Walker, 2006, p.18).

Recent discussions about sustainability suggest that a **fourth element** is needed, although challenge appears to what this should be – i.e. culture, governance or ethics, all of which can be subsumed under social and/or economic considerations and this seems to be dependent on the roles of particular groups (Walker, 2011, p.127).

Indeed, Elkington (2004) revealed that driving business corporations towards sustainability via the 3BL approach was very difficult and inconvenient (p.3), might sometimes be unhelpful and not result in true integration (p.15). This is considered to be an “initiative” approach to sustainability, and that a much more “comprehensive” approach engaging with a wide range of stakeholders will be needed in the twenty-first century (Elkington, 2004, pp.15–16).

Scruton (2012) suggests that a global agenda that embraces localisation could lead to sustainable processes (p.399); at a local level, the underlying principles of sustainability might be found, especially within the family, community and home, which would foster a spirit of stewardship, a sense of caring, sharing resources and responsibility and attachment (pp.412–413). Sustainability is embedded in processes that have occurred over a long period of time in particular places, e.g. a steady process of cultural accretion practised by *local craftsmen* (Van der Ryn and Cowan, 1965, p.85).

Others have developed models of sustainable products and systems development to supplement or supersede the 3BL; yet the term remains recognized as encapsulating elements of sustainability (Maxwell and van der Vorst, 2003 cited in Melles, De Vere and Mistic, 2011, p.145). With regard to sustainable and meaningful design, Walker (2011) proposed the Quadruple Bottom Line for sustainability as follows.

- **Quadruple Bottom Line (4BL) – an emerging model of sustainability**

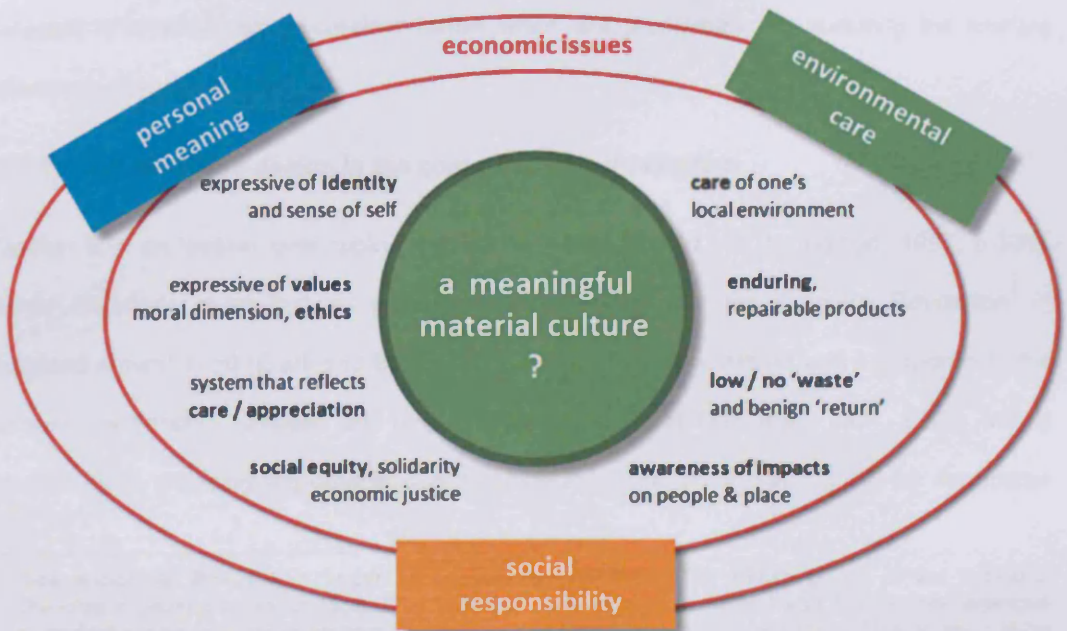
Walker (2011, p.127) argues that the 3BL is missing an element of individuality – a fundamental aspect of being human besides social justice; thus a profound understanding of sustainability should be nurtured at the *individual level* if it is to foster a basis for responsible activity.

Walker (2011, p.127) suggests including references to inner values, spirituality and ethics in terms of “personal meaning” within a quadruple bottom line of sustainability and has developed a general principle for the creation and manufacture of designed products, as illustrated in Figure 2.2.

*“...The fourth element of a quadruple bottom line for sustainability proposed here is ‘personal meaning’ [including inner values, spirituality and ethics] – a term acknowledging that sustainability has to be relevant and meaningful to the individual person, as well as socially responsible. It is a term that is broad enough to include a wide range of understandings and practices that different people find meaningful and enriching.” (Walker, 2011, p.127)*

**Figure 2.2 A Quadruple Bottom Line for sustainable and meaningful design**

(Source: Reproduced as per the original in Walker, 2011, p.190)



## 2.3 DESIGN IN RELATION TO SUSTAINABILITY

---

In the general context, design practitioners describe the contemporary understanding of design as: “a *process* and a manifestation of how we think about and conceptualize needs and wants” (Walker, 2011, p.119); and as *ideas* or *creativity* that link with innovation to become practical and attractive propositions for users or customers (Cox cited in Hunter, 2010).

In relation to sustainability, design is discussed as an *activity* that can both make a positive contribution to and have a negative impact on multiple elements of sustainability. This section provides a reflection on the roles of design in the context of sustainability:

- Design as a dilemma in relation to sustainability issues;
- Design in the transition to a sustainable society;
- *Design for sustainability.*

### 2.3.1 Design as a dilemma in relation to sustainability issues

Clark and Brody (2009) note that design has been inextricably connected to capitalism (p.147), industrialization, technology, mass production (p.336), commercial goods (p.358), consumption and consumerism (p.298) and globalisation (p.419). Design focusing on these aspects is emphasised as creating issues which are problematic for nurturing the multiple elements of sustainability.

#### 2.3.1.1 Art, craft and design in the context of industrialization

Design is a profession overlapping with art and craft (Ihatsu, ed. by Harrod, 1997, p.303). Many historians claim that design began coincidentally with the Industrial Revolution<sup>8</sup> in England around 1750 (Clark and Brody, 2009, p.358). Industrial design was a response to the uneasy relationship between art<sup>9</sup> [and craft] and machines (Papanek, 1971, p.30), with a special focus on designing objects with machine tools (Papanek, 1971, p.30) for commerce

---

<sup>8</sup> **The Industrial Revolution** began in England around 1750. The British phase of the Industrial Revolution peaked at about 1850. After that, the USA became prominent and its character changed to putting greater emphasis on scientific research and technological development. This, in the mid-to-late nineteenth century, led to mass production (Walker, 2011c).

<sup>9</sup> **The uneasy relationship between art and machines:** Artists may see machines as a threat, a way of life, or salvation (Papanek, 1971, p.44), especially those for decorative embellishment.

(Clark and Brody, 2009, p.358) due to socio-economic forces (Clark and Brody, 2009, p.336). With the rise of industrialization in the late eighteenth and early nineteenth centuries, craft production (of unique objects) began to wane (Clark and Brody, 2009, pp.336, 358).

Industrial design was called upon to develop and define objects that could be mass-produced and sold to a great number of consumers (Clark and Brody, 2009, p.358) and is defined by Harold Van Doren as follows:

*“Industrial Design is the practice of analyzing, creating and developing products for mass-manufacture. Its goal is to achieve forms which are assured of acceptance before extensive capital investment has been made and which can be manufactured at a price permitting wide distribution and reasonable profits.” (Harold Van Doren cited in Papanek, 1971, p.32)*

The industrial design profession was formed through the establishment of industrial design societies in Europe [from 1849], the Arts and Crafts movements in Britain and in the US [between 1860 and 1910] and the Bauhaus school of design [in 1919] in Germany (Papanek, 1971, p.30; Bhamra and Lofthouse, 2007, p.2). The term “designer”, in the nineteenth century was ambiguous and referred to a wide range of occupations, e.g. fine artists, architects, craftsmen, engineers and inventors; by the twentieth century, the term had developed into “industrial designer”, as it is known now (Bhamra and Lofthouse, 2007, p.2).

Industrial design is a broad and complex profession that shifts between the art and engineering fields (Bhamra and Lofthouse, 2007, p.3) and acts upon variables in business, marketing, consumer tastes, technology and aesthetics (Bhamra and Lofthouse, 2007, p.3), across a wide range of industries such as pharmaceuticals, packaging and electrical and electronic products (Bhamra and Lofthouse, 2007, p.3). Industrial design is strongly connected to advertising and marketing [and sales], with a major role being to create a new appearance for products, based on developing technologies to stimulate consumer interest (Walker, 2006, p.142) and lower manufacturing and sales costs (Papanek, 1971, p.32).

### 2.3.1.2 Design for mass production, commodities and consumerism

The methods of mass production that were established in the eighteenth century have remained in existence until the present, with the same notion of production for standardized products that are affordable in a given customer market and which will bring a greater profit margin to the manufacturer (Clark and Brody, 2009, p.339). *Consumerism*<sup>10</sup> has been developed and expanded in societies to help ensure the purchase of goods and services – with the aim of continuous growth that strengthens the economy.

Clark and Brody (2009) note that increases in profit have been found to be successful via the consumption of design in many forms, i.e. visual information (p.339), designed commodities, signs used in advertising (p.258) and particular brands (p.300). Designed commodities can: inform others of one's socio-economic status and aspirations (Clark and Brody, 2009, p.298), reflect a person's collective image or personal identity (Clark and Brody, 2009, p.258) and bring about a sense of belonging and acceptance within a given community or culture through adherence to the selected brand (Clark and Brody, 2009, p.300). In the contemporary market system, the aesthetics of products can be powerful in stimulating impulse purchases and consumerism, and this can be developed much more rapidly than the technologies applied within products (Walker, 2006, p.142).

In the last 50 years, there have been increasing rates of product-related waste (Walker, 2006, p.139) and so-called "dump design", which is extravagant, wasteful of energy and resources and polluting to the biosphere (Van der Ryn and Cowan, 1965, p.26). Rapid changes in product appearance can encourage customers' desire for "newness" that suddenly makes previous models "less desirable" or "old-fashioned" (Walker, 2006, p.142). This leads to increasing consumption, a desirable and fashionable lifestyle, throwaway habits, the depletion of natural resources, environmental damage and disposal of waste in landfill (Walker, 2006). Often, designers attempt to go beyond the primary functional requirements of method, use, need, "Telesis",<sup>11</sup> "association"<sup>12</sup> and aesthetics (Papanek, 1971, p.26). Design is cleverly

---

<sup>10</sup> **Consumerism:** the encouragement of consumption.

<sup>11</sup> **Telesis:** "The deliberate purposeful utilization of the process of nature and society to obtain particular goals" (Random House Dictionary, 1978 cited in Papanek, 1971, p.17).

<sup>12</sup> **Association:** "Our psychological conditioning, often going back to earliest childhood memories, comes into play and predisposes us to, or provides us with antipathy against, a given value"; "family and early environment, education and culture" (Papanek, 1971, pp.7, 19).



used to stimulate human interest, but has neglected the relationship with other creatures (Van der Ryn and Cowan, 1965, p.25). Tim Cooper (cited in Clark and Brody, 2009, p.461) estimates that 80 per cent of a product's environmental impact can be fixed at the point of design.

### **2.3.1.3 Design in the context of globalisation**

Globalization emerged in the 1970s as an interwoven and positive way of seeing the world as a single economy and culture (Saul, 2005). This view was converted into forceful and inevitable policy and laws during the 1980s and 1990s (Saul, 2005. p.3). Globalization continues to shape the world with divergent thinking about political, economic, technological, social and cultural principles (Clark and Brody, 2009, p.419).

In fact, globalization began slowly in the sixteenth century through global exploration and colonization (Clark and Brody, 2009, p.419) with exported goods and overseas trade. It was driven by advances in technology and communications, especially the invention of the digital computer and the Internet (communication via computer networks) developed in the 1940s and 1960s respectively (Computer Hope, ca.2013).

Globalization, computers and the Internet have significantly changed the ways people live and make things. More importantly, they have given us a sense of modernity and obsolete traditions (Craft Revival Trust et al., 2005, p.4). Over the last three decades, the consequences of globalization have become obvious, whether it is its remarkable successes, disturbing failures or problematic issues, especially in the areas of economics, politics and sociology (Saul, 2005. p.3). Design is aligned to globalisation in many aspects of production, markets, economies and symbolic roles (Clark and Brody, 2009, p.419).

Globalization creates both opportunities and challenges for large corporations in the form of a dynamic and competitive worldwide market environment, whereby companies in different countries can manufacture similar and innovative products to satisfy customers of particular cultures and preferences in different countries worldwide (Koren, 2010 cited in Garbie, 2013, p.479). Technological development is a powerful resource in globalization, and many designers embrace such developments while others are unhappy about the changes driven

---

by technology (Clark and Brody, 2009, p.384). Regarding the unrestrained development of technology, David Orr (2003) warns that this can lead to unforeseen risk that will overwhelm the capacity of human and natural systems.

With its strong connections to capitalism and consumerism for greater profit margins, design is condemned for leading to problematic issues of resources and social inequity such as the fact that 20 per cent of the global population controls 80 per cent of the world's resources (Clark and Brody, 2009, p.438). These kinds of issues were emphasised by Victor Papanek in 1971, when design was facing a dilemma between profit and social responsibility, rich and poor and could create objects for a wasteful society (p.39); his observations remain valid. In spite of economic forces, Papanek (1971) urges designers to contribute to real human and social needs (p.39), stressing that design must be meaningful (p.6).

Clark and Brody (2009) contend that in the context of globalization and a homogenous world, world markets become apparently reliant on design (p.416) i.e. for national and cultural identities (p.419). Several cities and nations are thus working on branding themselves to be recognised in the global marketplace for economic success i.e. through local identities based on unique geographies and exoticisms (Clark and Brody, 2009, pp.416, 419). Yet scholars have argued that such branding initiatives can only reinforce generalized and ordinary values (Clark and Brody, 2009, p.420).

### **2.3.2 Design in the transition to a sustainable society**

Sustainability is the most daunting challenge that people now face (Ahmed and McQuaid, 2005 cited in Cadman, 2009, p.38), as it involves dealing with divergent problems which reflect tensions between competing perspectives that are difficult to resolve but which can be transcended (Schumacher, 1977, pp.120–130 cited in Orr, 2003). It requires a number of approaches that vary according to communities' interests (Van der Ryn and Cowan, 1965, p.20) and needs action from various groups<sup>13</sup> at different levels (Van der Ryn and Cowan, 1965, p.4; Bhamra and Lofthouse, 2007, p.14).

---

<sup>13</sup> **Various groups:** e.g. global policy-makers, environmental experts, grassroots, environmental and social groups, local people and communities (Van der Ryn and Cowan, 1965, p.4), governments and non-governmental organizations (NGOs), businesses and individuals across the world (Bhamra and Lofthouse, 2007, p.14).

In this situation, it is possible that people will be overwhelmed by information overload (Zengotita, 2002 cited in Orr, 2003), or in particular face gaps which go beyond their capability (Thomas Homer-Dixon, 2000 cited in Orr, 2003). In reference to Schumacher, Orr (2003) suggests that it is vital to get down to work within the time available and to embrace wisdom, spiritual awareness, love, compassion, understanding and empathy – because sustainability issues cannot be solved by rational means alone. To create more sustainable societies, scholars suggest possible directions such as:

- Developing models, metaphors and measurements that could accurately describe human activities and their relation to the biosphere (Orr, 2003), e.g.:
  - *Conceptual frameworks* for sustainable consumption [and production] that resists consumerism (Jackson, 2006);
- Designing a system of production and commerce in which each and every action is inherently sustainable and restorative (Paul Hawken, 1993 cited in Elkington, 1997, p.38), e.g.:
  - *Cradle to Cradle* – the idea that “waste equals food” as a basis for designing products that embrace a restorative process through the effective use of “biological” and “technical nutrients” that can be reclaimed and recirculated within the closed loop of industrial production (McDonough and Braungart, 2002 cited in Van der Ryn and Cowan, 1965, pp.10–11);
  - *The integration of production scales*<sup>14</sup> appropriate to the locality that considers the nature of local people and resources in design (Schumacher, 1973, pp.57, 147; Van der Ryn and Cowan, 1965, p.13; Walker, 2006, pp.93–97, 2013a) – e.g. small-scale production with the technologies appropriate for local people to take ownership (Schumacher, 1973, pp.57, 147), a culture which embeds the repair or reuse of standardized mass-produced parts by people at the local level (Walker, 2006, ed. by Clark and Brody, 2009, p.340).

---

<sup>14</sup> **The integration of scales:** e.g. large- and small-scale production for global and local contexts.

- Informing and enhancing the creativity of a sustainable society through *education* (Orr, 2003).

### 2.3.3 **Design for sustainability**

The relation between design and sustainability is found via material culture and the creation of artefacts. **Sustainability** can be described as a cultural process employed in our everyday activities with responsibility for both the people and ecosystems of particular places (Van der Ryn and Cowan, 1965, pp.81–83). **Culture** is constituted by our social exchanges with individuals and our interactions with artefacts (Clark and Brody, 2009, p.218) and can be assessed in terms of people (anthropology) and material manifestations (archaeology) (Clark and Brody, 2009, p.219). **Design** could manipulate the culture of sustainability through materials and the creation of artefacts (Clark and Brody, 2009, p.219) which convey beliefs, values, ideas and attitudes about and assumptions towards a particular community or society at a given time (Jules Prown cited in Clark and Brody, 2009, p.218).

In this thesis, terms relating to sustainability include, “sustainable development”, “*design for sustainability*” and sustainable. These terms are described below and their relationship is illustrated in Figure 2.3.

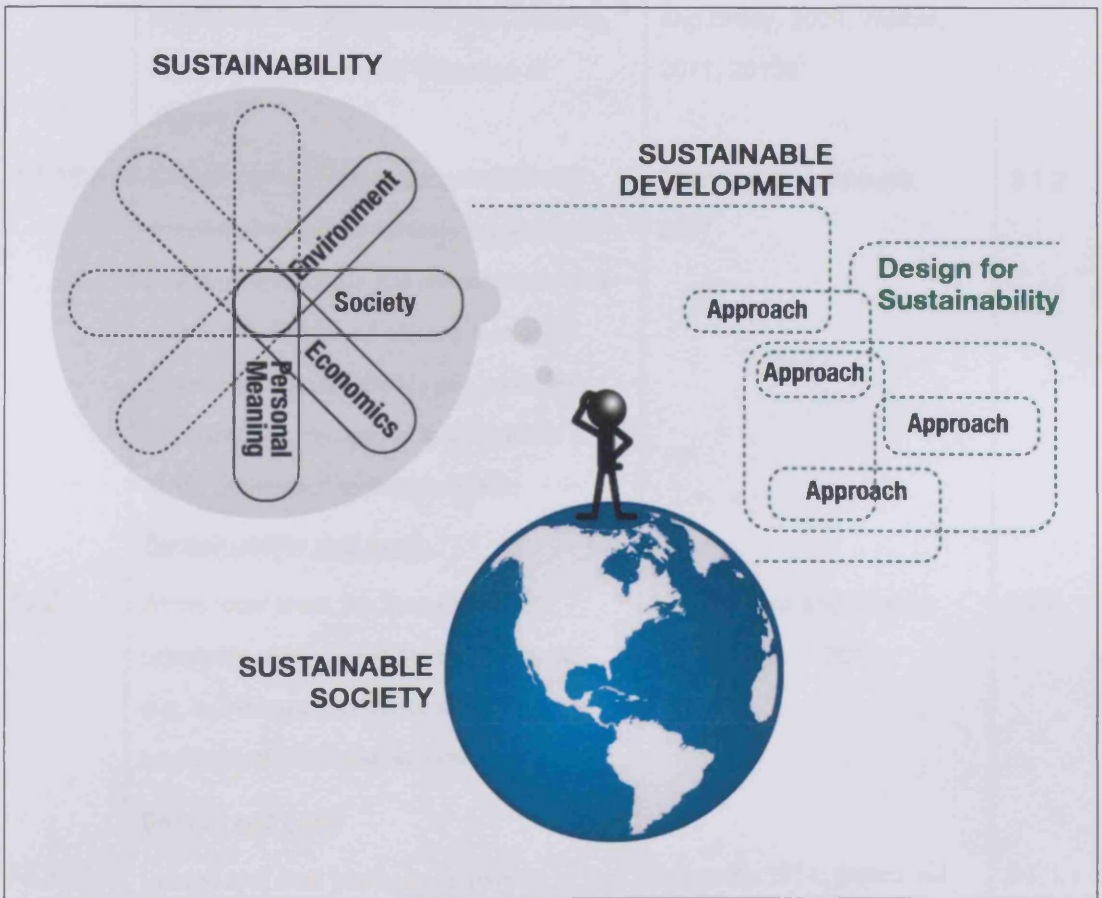
**Sustainability** is identified as a principle of the twenty-first century for *change* in human activities towards more *responsible ways of living* that deal with interdependent elements of sustainability (Elkington, 1997, p.20; Walker, 2011, p.130). These elements are not limited to the three areas of environment, society and economics frequently discussed in the literature as the Triple Bottom Line (Elkington, 1997, p.20). The addition of a Quadruple Bottom Line has also been suggested; this includes *personal meaning* (spiritual growth, inner values, questions of ethics and conscience), *social meaning* (justice, equity, moral progress, charity) and *practical meaning* (utilitarian needs in conjunction with environmental care) that could also provide *economic means* (Walker, 2011, p.130; Walker, 2012, pp.153–157; Walker, 2013b).

**Sustainable development** is a *process* in transition to a more sustainable society (Bhamra and Lofthouse, 2007, p.14).

**Design for sustainability** is a strategic approach within the development process for attaining sustainability (Bhamra and Lofthouse, 2007, p.1); it is one of many approaches in the development process (Van der Ryn and Cowan, 1965).

“**Sustainable**” as part of speech (as in *sustainable* society, activities and products) conveys a deeper meaning than that of the dictionary definition (sustaining, maintaining or continuing in the long term). Sustainability does not necessarily mean things remain unchanged (Nair, 2011, pp.50–51). “Sustainable” in this context also encapsulates the multiple elements which are included in the triple or quadruple bottom line models.

**Figure 2.3 The relationship between terms relating to sustainability in this study**



## 2.4 CHAPTER SUMMARY

This chapter has presented the emergence and evolution of sustainability, various conceptions and contemporary understandings of sustainability and design in relation to sustainability. Finally, the key findings are summarised in Tables 2.6–2.8 regarding:

- (i) The relationship between sustainability, design and craft;
- (ii) The identification of gaps in sustainability, design and craft;
- (iii) Potential areas of *design for sustainability*.

**Table 2.6 Summary of the relationship between sustainability, design and craft**

Finding No.	Description	References	Section
	<b><u>Sustainability and design</u></b>		
F2.1(a)	Sustainability and design share common values in terms of the ways in which individuals live and interact with artefacts, e.g. in the creation and utilisation of objects.	Van der Ryn and Cowan, 1965; Elkington, 1997; Clark and Brody, 2009; Walker, 2011, 2013a	2.3.3
F2.1(b)	Design can support making radical and positive changes to society, especially in activities involved in the manufacture and commercialization of objects if multiple elements of sustainability are taken into account. Yet, <i>design for sustainability</i> is rarely addressed in design briefs.	Bhamra and Lofthouse, 2007	2.1.2
	<b><u>Sustainability and craft</u></b>		
F2.2	At the local level, the fundamental principles of sustainability can be found, e.g. in the steady process of the cultural traditions of local craftspeople.	Van der Ryn and Cowan, 1965; Scruton, 2012	2.2.4
	<b><u>Design and craft</u></b>		
F2.3(a)	Design and craft professions overlap in the creation of objects, yet items may be made using different production methods.	Papanek, 1971; Ihatsu, ed. by Harrod, 1997; Clark and Brody, 2009	2.3.1.1
F2.3(b)	The rise in design for industrial manufacture and mass-produced goods causes craft production to wane.	Clark and Brody, 2009	2.3.1.1

**Table 2.7 Summary of the gaps identified in sustainability, design and craft**

Finding No.	Description	References	Section
F2.4	There is little evidence of holistic thinking about <i>design for sustainability</i> , especially in design briefs for product development in manufacturing and commerce.	Bhamra and Lofthouse, 2007	2.1.2
F2.5	There is a need to inform and nurture a deeper understanding of the meaning of sustainability, especially in the manufacturing and business sectors.	Elkington, 1997; Dresner, 2002; Cadman, 2009	2.2.2

**Table 2.8 Summary of potential areas of *design for sustainability***

Finding No.	Description	References	Section
F2.6	Design approaches in industrial manufacture, mass-produced goods and commercialization – with radical changes towards sustainable development, i.e. design for localization and appropriate technologies	Van der Ryn and Cowan, 1965; Papanek, 1971;	2.1.1
		Meadows, Jorgen and Meadows, 1972;	2.1.2
		Schumacher, 1973;	2.1.3
		Elkington, 1997, 2004;	2.2.4
		Walker, 2006, 2013a;	2.3.1.2
		Bhamra and Lofthouse, 2007; Cadman, 2009; Clark and Brody, 2009; Scruton, 2012	2.3.1.3
			2.3.2
F2.7	Design platforms that nurture a deeper understanding of sustainability, including a sustainable society and <i>design for sustainability</i> , i.e. via design education, research, training and publication	Orr, 2003; Elkington, 2004;	2.1.1
		Walker, 2006; Bhamra and Lofthouse, 2007; Scruton, 2012	2.1.2
			2.1.3
			2.3.2
F2.8	Design strategies for sustainable development that offer long-term collaboration between various groups	Van der Ryn and Cowan, 1965; World Commission on Environment and Development, 1987; Bhamra and Lofthouse, 2007	2.1.2
			2.3.2

Chapter 3 will present craft in general and in the context of sustainability.

# Chapter Three

## Craft in General and in the Context of Sustainability

### 3.0 INTRODUCTION

---

This chapter presents a review of the literature about craft in a general and international context and also in the context of sustainability. It begins with craft in general (Section 3.1), including an explanation (Section 3.1.1) and classifications (Section 3.1.2) of crafts. This is followed by a consideration of craft and its historical development in the context of sustainability (Section 3.2). A brief discussion of the relationship between craft and *design for sustainability* (Section 3.3) is given together with six examples of craft-based design enterprises for sustainability (Section 3.3.2) from various countries. Finally, the key findings are summarised (Section 3.4).

### 3.1 CRAFT IN GENERAL

---

When discussing research into craft, people often enquire about the meaning of craft and handicraft – whether these are the same and which word should be used. This section explains the meanings of craft and handicraft from dictionary definitions and scholarly descriptions. It then explains the notion of craft for research purposes.

#### 3.1.1 Explanation of craft

##### 3.1.1.1 Dictionary definitions of “craft” and “handicraft”

According to the Oxford English Dictionary (2013), “craft” has different meanings in different contexts. In the context of this research, craft and handicraft are mentioned in terms of skill, art, product, knowledge, trade, professional work or occupation, making and workman – as defined by the Oxford English Dictionary (2013). Yet “handicraft” is defined more specifically as “manual skill or skilled work with the hands” (Oxford English Dictionary, 2013). In the



plural, various dictionaries<sup>1</sup> define crafts and handicrafts in reference to *objects* usually made by hand. Examples of the use of terms relevant to this research context are given as follows.

**Table 3.1 Meanings and examples of the use of terms – craft, handicraft**

(Source: Oxford English Dictionary, 2013)

Word	Part of speech	Meanings	Example
<b>CRAFT</b>			
Craft	Noun	Human skill, skilfulness, dexterity, art	
		A work or product of art	Furniture, shoe, pottery, jewellery
		A branch of learning, knowledge	Manual art, handicraft, woodcraft, art and craft
		Skilled work, art, trade or profession requiring special skill and knowledge	Carpenter, shoemaker, potter, goldsmith e.g. in forms of association, union, guild, company
To craft	Verb	To make or construct (something) skilfully	
<b>HANDICRAFT</b>			
Handicraft	Noun	Manual skill, skilled work with the hands	
		A manual art, trade or occupation	
		Handicraftsman, artisan, workman	Taylor, smith, mason, carpenter
Handicraft	Adjective	Manual, practical	

### 3.1.1.2 Scholarly descriptions of “craft” and “handicraft”

#### ▪ Craft

Over the centuries, craft has been defined many times (Niedderer and Townsend, 2010, p.4) in association with ways of living and social change (Lucie-Smith, 1981), especially a means of changing the condition of society (Lucie-Smith, 1981, p.207), the role of craftspeople within society (Lucie-Smith, 1981, pp.7–8) and attitudes towards craft and craftspeople (Lucie-Smith, 1981, pp.18–19, 143, 207). Toward the end of the nineteenth century, the term “craft” began to be widely used for “handmade decorative arts”, influenced by John Ruskin and William Morris in their writings and the foundation of the Arts and Crafts movement (Shiner, ed. by Alföldy, 2007, p.34) to distinguish *handmade* products from *machine-made* goods and industrialisation.

<sup>1</sup> Various dictionaries: Macmillan Dictionary (2009); Longman (2013); Cambridge Dictionaries Online (2013).

Many scholars have described contemporary meanings of craft and ways to view it in numerous ways.

**Table 3.2 Comprehensive descriptions of craft by scholars**

Meaning	References	Example
Concept	(Adamson, 2007, pp.3, 6, 7; Niedderer and Townsend, 2010, p.3)	Idea or thinking of doing something
Maker	(Dormer, 1997, p.7)	Craftsperson, e.g. weaver, carpenter, potter, jeweller
Skill and handwork	(Lucie-Smith, 1981, p.7; Dormer, 1997, p.7; Shiner, ed. by Alfoldy, 2007, p.40; Adamson, 2010, p.2)	Manual skill in weaving, carving, throwing, welding, etc.
Process used for making objects	(Lucie-Smith, 1981, p.7; Dormer, 1997, p.7; Shiner, ed. by Alfoldy, 2007, p.40; Adamson, 2007, p.4)	Yarn spinning, handloom weaving, sewing, tailoring
Discipline or practice-based knowledge	(Dormer, 1997, pp.7, 18; Adamson, 2007, pp.3, 10; Niedderer and Townsend, 2010, pp.3, 4)	Wickerwork, textiles, carpentry, ceramics, silverware
Category of fixed sets of objects	(Adamson, 2007, pp.3–4)	Basketry, textiles and garments, furniture, home decoration and accessory, tableware, jewellery
Practical expression of social life	(Lucie-Smith, 1981, p.7)	Sense of individuality and responsibility of a craftsperson and his/her role in society
Element involved in cultural practice and production	(Adamson, 2007, p.2; Adamson, 2010, p.3)	Architecture, painting, sculpture, artisanal products, traditional ceremonies, traditional dress
Means of human and social development	(Adamson, 2007, pp.5, 69)	Human development through skilled work and relationship with materiality  Social movement towards changes in production, such as changing from handmade to machine-made, from cottage work to industrial factory work

Adamson (2010, p.1), in reference to Moxon (1677), says that craft cannot merely be explained through written words or sentences because of the inadequacy of words to convey true meanings or to judge craft-making. Adamson notes that craft goes *beyond* disciplinary frameworks (2010, p.10) or a fixed set of disciplines (2010, p.2) or categories (2007, p.4) – all of which are purposely created for “dividing up the world of production” of goods for particular trades specifically for “English-speaking cultures” (2010, p.2).

Besides defining or describing what craft and handicraft mean, scholars also suggest that it is necessary to understand its nature. Craft has characteristics of *diplomacy*, which can provide solutions to difficult situations in society and help to correct them or moderate radical ideas (Ihatsu, ed. by Harrod, 1997, p.304). Craft embraces a tendency to *self-restriction* between the basic and the extreme and conveys *essential humanity* (Ihatsu, ed. by Harrod, 1997, p.304). Craft is *medium-specific* (Metcalf, 1993, ed. by Alfoldy, 2007, p.5) in relation to process and materials (Adamson, 2007 p.1), yet *flexible* – an attribute that has enabled craft to persist over a long period of time (Niedderer and Townsend, 2010, p.4), and *fluid and relative* (Adamson, 2010, p.2).

- **Handicraft**

The United Nations Educational, Scientific and Cultural Organization (UNESCO), Bangkok office initiated The Award of Excellence Programme in 2001, namely the “UNESCO Award of Excellence for Handicrafts” and defined the term “handicrafts” as encompassing a wide range of production techniques, purposes and appearances. This is not limited to objects that comprise “everything” handmade. Handicrafts are described as follows:

*“These can be defined as products, which are produced either completely by hand or with the help of tools. Mechanical tools may be used as long as the direct manual contribution of the artisan remains the most substantial component of the finished product. Handicrafts are made from raw materials and can be produced in unlimited numbers. Such products can be utilitarian, aesthetic, artistic, creative, culturally attached, decorative, functional, traditional, religiously and socially symbolic and significant.” (UNESCO Bangkok, 2001)*

### **3.1.1.3 Ways to view craft for research purposes**

The notion of craft and handicraft can vary according to *purpose*. Adamson (2007, p.1) reveals that a majority of craft literature is written for “promotional” purposes, while some is written in the context of “critical” discourse; only a few examples are written from a “historical” perspective; and *not many* deal with “theoretical” terms (craft as an idea).

Breslin and Buchanan (2008, cited in Roworth-Stokes, 2012, p.1643) suggest that case studies can bridge the gap between “the development of theory and practice”, yet case studies appear rarely in design education (which often includes contemporary craft). In an audit of design journals for a number of case studies classified by subject, Roworth-Stokes (2012, p.1638) finds that “contemporary crafts/textiles” is an area with only a few cases represented (3 out of 121), while “Architecture/built environment” and “Product design” cases represented nearly half of the total number (57 combined).

This finding suggests there is a disproportionately low number of craft case studies in an educational context and in theory building (Roworth-Stokes, 2012, p.1643). A growing number of researchers from various disciplines are looking into the craft field (Niedderer and Townsend, 2010, p.3). In an international context, craft is discussed in relation to various subjects as follows (see Section 3.1.2 for further information):

- The progressive theory of *history*;
- Critical *discourses* and thematic terms;
- *Business* operation;
- *Manufacturing* and industrial *economic* activities;
- Creative industry and *creative economy*.

**For the purpose of research** associated with craft, scholars suggest considering craft as a contemporary discipline/concept and/or process that allows craft to connect with a wide range of activities.

**Craft as a contemporary discipline/concept** is in fact a subject of research into “processes, materials and skills” in relation to “technological challenges”, “aesthetic judgement” and “cultural context”; these could offer a creative vision for the future, especially in the implementation of sustainability, which involves various elements of society, economics and the environment (Niedderer and Townsend, 2010, pp.3–4).

**Craft as a process** (Adamson, 2007, pp.3–4) is concerned with small-scale production (Adamson, 2010, pp.2–3) that embraces thinking, skill, attitude and material experience in

practice (Adamson, 2007, pp.3–4). Process connects craft to a wide range of activities including architecture, painting, printing, sculpture, designing prototypes, digital rendering, routines of maintenance and repair, couture, gardening, cookery, factory work, construction work and more (Adamson, 2010, pp.2–3).

### 3.1.2 Classifications of crafts

Craft in an international context is discussed in relation to various subjects, i.e. history (Section 3.1.2.1), critical discourses (Section 3.1.2.2), business operation (Section 3.1.2.3), manufacturing and industrial economic activities (Section 3.1.2.4), the creative industry and the creative economy (Section 3.1.2.5). "Classification provides certainty" and can help to draw out the understanding of a subject (Niedderer and Townsend, 2010, p.5). Yet craft (as thinking or doing) can transcend to various subjects; so a variety of craft classifications exist and it is not easy to discuss craft from a *fixed* set of classifications (Adamson, 2007, pp.4, 6).

#### 3.1.2.1 **Crafts classified by the progressive theory of history**

From a Western perspective, genres of craft consortiums from past to present can be *broadly* classified into three main groups: (i) traditional craft; (ii) contemporary craft; (iii) craft in modernity (Adamson, 2007; Forrest cited in Alfoldy, 2007, foreword).

- **Traditional craft** conveys a series of multicultural societies and histories in the form of objects which are limited to or suggested by tradition (Metcalf, 1993, ed. by Alfoldy, 2007, p.6). Sometimes scholars use alternative terms (i.e. "handicraft" (Ihatsu, ed. by Harrod, 1997, p.303), "traditional handicraft" (Humphreys, 1999, p.58), "handcrafted" (Botnick and Raja, 2011, p.50)) to mean traditional craft.
- **Contemporary craft** is guided by art and/or design to combine aesthetics, individuality, function, customer service, problem-solving, rational analysis and technology (Ihatsu, ed. by Harrod, 1997, p.303). Other craft terms that fall into the contemporary group are: "arts and crafts" or "art-craft", "craft and design" or "craft-design", "fine crafts" (Lucie-Smith, 1981; Harrod, 1997; Adamson, 2010),

“studio crafts”<sup>2</sup> (Dormer, 1997, p.7), “conventional craft”<sup>3</sup> (Ihatsu, ed. by Harrod, 1997, p.302) and “industrial craft”<sup>4</sup> (Williamson, 1956; Yanagi, 1972, ed. by Adamson, 2010, p.168).

- **Craft in modernity** is the transformation of craft within the process of modernization; it is a means of articulating thinking into action amid the two paradoxical cultural strands of “modernity”<sup>5</sup> and “tradition” (Adamson, 2010, pp.4–5). It is craft that continues in association with issues of modernity (Alfoldy, 2007, p.xiv), e.g. the global context, political economy, utopian ideals and new technologies (Forrest cited in Alfoldy, 2007, p.xiv).

### 3.1.2.2 Crafts in critical discourses and thematic terms

Besides the three broad categories mentioned above, a number of craft terms are also discussed in the scholarly literature within the specific contexts of craft developments in different continents (i.e. Europe, America, Africa and Asia). This literature review is inevitably limited to work which has been translated into English. These terms are presented in groups as follows:

---

<sup>2</sup> **Studio crafts** cover the activities of every craftsman who practices a craft medium to produce functional ware [in a studio] (Dormer, 1997, p.7).

<sup>3</sup> **Conventional craft** is similar to craft-design (and industrial design) in that it involves production of functional objects that starts with service between makers and users (Ihatsu ed. by Harrod, 1997, p.302).

<sup>4</sup> **Industrial craft** is a collaborative approach involving craftspeople and their traditional skills and designers in developing innovative crafts by various means.

<sup>5</sup> **Modernity** usually refers [in western perspective] to a post-traditional, post-medieval historical periods, when social structure shifted from feudalism towards capitalism, industrialization, secularization, rationalization (Barker, 2005, p.444).

**Table 3.3 Crafts in critical discourses and thematic terms**

Thematic term	Brief description, source
Aristocratic crafts	Yanagi (1972, ed. by Adamson, 2010, p.168) explains this term as crafts “under the patronage of a feudal lord”, e.g. in Japan, England.
Artist crafts Individual crafts	The terms signifies objects made by a few, for a few, at a high price – consciously made and signed, e.g. in Japan (Yanagi, 1972, ed. by Adamson, 2010, p.168).
Commercial crafts Commercialized crafts	The terms relate to situations where production is led by economic benefits, e.g. in Thailand (Cohen, 2000; Wherry, 2008) and Costa Rica (Wherry, 2008), by adapting traditional crafts for local production for tourist market and export.
Digital artisans Digital craft Digital and craft Digital culture Digital hand Digital and handmade Digital technology Lab craft	<p>These terms are used in the context of the broader <i>contemporary craft</i> genre in relation to technological developments, i.e. digital technologies (Niedderer and Townsend, 2010, p.5; Adamson, 2010, pp.310, 317; Crafts Council, 2011) and the importance of craft in contemporary life in relation to issues of modernity (articles<sup>6</sup> in a book edited by Alfoldy, 2007, pp.225, 240, 249).</p> <p>Examples of digital technologies include, 3D Scanning, CAD: Computer Aided Design, CAM: Computer Aided Manufacture, Computer Numerical Control (CNC) Milling and Routing, Digital Textile Printing, Electronic Jacquard Loom, Laser Cutting, Rapid Prototyping or Manufacturing and Water Jet Cutting (Crafts Council, 2011). Digital scanning and printing are widely used in the production of textiles and jewellery, for example (Crafts Council, 2011).</p>
Folk crafts	Yanagi (1972, ed. by Adamson, 2010, p.168) describes this term in opposition to artist/individual crafts to mean crafts which are made by a community of craftspeople, “unsigned” by the people and available in quantity e.g. the Gothic crafts. Folk crafts are usually sold at a low price.
Industrial crafts	Crafts made under the industrial system by mechanical means, e.g. aluminium saucepans (Yanagi, 1972, ed. by Adamson, 2010, p.168).
Materials and practice-based knowledge	<p>Craft classification based on practice-based knowledge is widely regarded (Dormer, 1997, pp.7, 18; Adamson, 2007, pp.3, 10; Niedderer and Townsend, 2010, pp.3–4) as a way to classify crafts based on human skill in association with a specific process and materials.</p> <p>These crafts are sorted into groups, for example, ceramics, metalwork, enamelling, jewellery-making, textiles, glass-making, woodworking and paper-making. This kind of craft classification is used to divide production for particular commodity trades (Mohanty, 1990, p.25; Adamson, 2010, p.2).</p>
NeoCraft	Alfoldy (2007, p.xiv) introduces the term “NeoCraft” as an alternative model for the discussion and assessment of crafts applied diversely to interdisciplinary fields, e.g. design, art history, anthropology, philosophy, history, women’s studies, or fashion. It seeks factual information on attitudes towards craft, methodological approaches, theories, research tools, research techniques of history – in relation to the importance of craft in contemporary life in relation to issues of modernity.

<sup>6</sup> The articles in a book edited by Alfoldy (2007): “Otherwise unobtainable: the applied arts and the politics and poetics of digital technology” (Harrod, p.225); “Rethinking dichotomies: crafts and the digital” (Jonsson, p.240); “Handmade futures: the emerging role of craft knowledge in our digital culture” (Press, p.249).

### 3.1.2.3 Crafts classified by business operation

From the perspective of business agents,<sup>7</sup> crafts are classified according to “product categories”, “materials” and “techniques”. In addition, other sub-classes may include: “purpose of use” and “themes or styles”. The headings and sub-headings used in craft classifications vary, and there is no common standard of classification.

**Table 3.4 Summary of craft classification by business operation**

<b>Ways to classify crafts</b>	<b>Examples of headings</b>
Product categories	Accessories, bookmarks, boxes and cases, figurines, furniture, garments, gemstones, gifts, houseware, home decoration, jars, jewellery, leatherware, models, souvenirs, stationery, tableware, textiles and apparel, toys and games,
Materials	Bamboo, brass, ceramics and enamel, crystal, glass, gold, iron, leather, metal, organic, paper, plastic, resin, silver, stone, textiles, wood
Techniques	Carving, crocheting, dyed-colouring, engraving, glazing, knitting, painting, sewing, wickerwork
Purposes of use	Art and collectible, business gifts, Feng Shui, holiday decoration and gifts, home decoration, souvenirs
Themes, styles	Angels, animals, imitation antiques, artificial, Buddhist themes, flowers, folk art, hill tribes, love, music, religious

Crafts can also be viewed from the perspective of global trade and their geographic origin, so the major craft industries are associated with Asia, Europe, Africa, Australia and New Zealand and America and Canada as follows (Craft Central, ca.2009).

<sup>7</sup> **Business agents:** Alibaba.com [China] (1999); UNESCO Bangkok (2001); The Association for the Promotion of Traditional Craft Industries [Japan] (2009); Northern Handicrafts Manufacturers and Exporters Association (NOHMEX) [Thailand] (2009); Bassett (2010); Craft Central (ca.2009).



**Table 3.5 Continents and craft industries: features and contributions**  
(Source: Craft Central, ca.2009)

	<b>Asia</b>	<b>Europe</b>	<b>Africa</b>	<b>Australia and New Zealand</b>	<b>America and Canada</b>
<b>Types of craft</b>	<ul style="list-style-type: none"> <li>• Ceramics</li> <li>• Clay pieces</li> <li>• Fibre crafts</li> <li>• Furniture</li> <li>• Gems and stones</li> <li>• Glass crafts</li> <li>• Jewellery</li> <li>• Leather-based products</li> <li>• Metal crafts</li> <li>• Paintings</li> <li>• Paper crafts</li> <li>• Pottery</li> <li>• Sculpture</li> <li>• Textiles</li> <li>• Toys</li> <li>• Wood crafts</li> </ul>	<ul style="list-style-type: none"> <li>• Ceramics</li> <li>• Leatherwork</li> <li>• Beadwork</li> <li>• Needle crafts</li> <li>• Jewellery</li> <li>• Giftware</li> </ul>	<ul style="list-style-type: none"> <li>• Leatherwork</li> <li>• Ceramics</li> <li>• Woodwork</li> <li>• Masks</li> <li>• Musical instruments</li> </ul>	<ul style="list-style-type: none"> <li>• Ceramic arts and crafts</li> <li>• Jewellery: jade, abalone</li> <li>• Decorative hand-blown glass</li> <li>• Giftware</li> <li>• Paper crafts</li> <li>• Home ware</li> <li>• Wooden toys</li> <li>• Natural cosmetics</li> </ul>	<ul style="list-style-type: none"> <li>• Ceramics</li> <li>• Glasswork</li> <li>• Jewellery</li> <li>• Beadwork</li> </ul>
<b>Operations</b>	<ul style="list-style-type: none"> <li>• Manufacturing</li> <li>• Highly diversified in manufacturing groups</li> </ul>	<ul style="list-style-type: none"> <li>• Non-primary private enterprises (SMEs)</li> <li>• Craft-trades</li> </ul>	<ul style="list-style-type: none"> <li>• Oldest trade commodities</li> <li>• Well-managed sectors</li> </ul>	<ul style="list-style-type: none"> <li>• Cottage industries</li> <li>• Specialist</li> <li>• Niche products</li> <li>• Contemporary</li> <li>• Indigenous</li> </ul>	<ul style="list-style-type: none"> <li>• Highly diversified and enterprising, e.g. guilds, individuals, enterprises, organizations</li> </ul>
<b>Contributions</b>	<ul style="list-style-type: none"> <li>• Employment</li> <li>• Economic development of rural areas</li> <li>• Raising the standard of living</li> </ul>	<ul style="list-style-type: none"> <li>• Employment</li> <li>• Source of jobs</li> <li>• Business ideas</li> </ul>	<ul style="list-style-type: none"> <li>• Employment</li> <li>• Economic growth</li> <li>• Raise socio-economic status and increase self-reliance</li> </ul>	<ul style="list-style-type: none"> <li>• Employment</li> <li>• Economic growth</li> <li>• Identity</li> </ul>	<ul style="list-style-type: none"> <li>• Employment</li> <li>• Large market size</li> </ul>

### 3.1.2.4 Crafts in manufacturing and industrial economic activities

The United Nations Statistics Division (UNSD, 2002) identifies 88 classifications of industrial and economic activity, known as the “International Standard of Industrial Classification of All Economic Activities, Revision 4” (ISIC Rev.4). Some craft categories (as mentioned above) can be considered to belong to the *manufacture* group in ISIC. There are sub-groups within the manufacture group and less than half are craft-related. This classification indicates that crafts, as materials and products, contribute to economic development.

**Table 3.6 Crafts in manufacturing and industrial economic activities**

(Source: ISIC Rev.4 by UNSD, 2002)

<b>Main group (and number of sub-group) = 88</b>	
<ul style="list-style-type: none"> <li>• Agriculture, forestry and fishing (3)</li> <li>• Mining and quarrying (5)</li> </ul>	
<ul style="list-style-type: none"> <li>• <b>Manufacturing (24)</b></li> </ul>	<p><b>Manufacture sub-groups</b></p> <ul style="list-style-type: none"> <li>• Textiles</li> <li>• Apparel</li> <li>• Leather and related products</li> <li>• Wood, products of wood and cork (except furniture), articles made of straw and plaiting materials</li> <li>• Paper and paper products</li> <li>• Printing and reproduction of recorded media</li> <li>• Rubber and plastic products</li> <li>• Other non-metallic mineral products</li> <li>• Basic metals</li> <li>• Fabricated metal products (except machinery and equipment)</li> <li>• Furniture</li> </ul>
<ul style="list-style-type: none"> <li>• Electricity, gas, steam and air conditioning supply (1)</li> <li>• Water supply, sewerage, waste management and remediation activities (4)</li> <li>• Construction (3)</li> <li>• Wholesale and retail trade, repair of motor vehicles and motorcycles (3)</li> <li>• Transportation and storage (5)</li> <li>• Accommodation and food service activities (2)</li> <li>• Information and communication (6)</li> <li>• Financial and insurance activities (3)</li> <li>• Real estate activities (1)</li> <li>• Professional, scientific and technical activities (7)</li> <li>• Administrative and support service activities (6)</li> <li>• Public administration and defence, compulsory social security (1)</li> <li>• Education (1)</li> <li>• Human health and social work activities (3)</li> <li>• Arts, entertainment and recreation (4)</li> <li>• Other service activities (3)</li> <li>• Activities of households as employers, undifferentiated goods- and services producing activities of households for own use (2)</li> <li>• Activities of extraterritorial organizations and bodies (1)</li> </ul>	

### 3.1.2.5 Craft in the creative industry and the creative economy

In 2001, John Howkins introduced<sup>8</sup> the concept of the creative economy, arguing that creativity and creative assets can provide extraordinary value, economic development and wealth (The United Nations Conference on Trade and Development, UNCTAD, 2008, p.15).

Creative industries are a foundation of the creative economy (UNCTAD, 2008. p.15).

Many agents, including UNCTAD, have developed classification models of cultural and creative industries for measuring the creative economy. Craft and design are identified as part

<sup>8</sup> In a book, namely *The Creative Economy: How People Make Money From Ideas* (Howkins, 2001).

of the creative industries in the “heritage” and “functional creations” groups respectively (UNCTAD, 2008, pp.13–14). *Heritage* is the soul of cultural and creative industries, conveying folklore, traditional knowledge and cultural expressions (of particular localities), e.g. in the form of craft traditions (UNCTAD, 2008, p.14).

**Table 3.7 UNCTAD classification of creative industries**  
(Source: UNCTAD, 2008, pp.8, 14)

Heritage	Arts	Media	Functional creations
<ul style="list-style-type: none"> <li>• <i>Traditional knowledge and cultural expressions:</i> art <b>crafts</b>, festivals and celebrations;</li> <li>• <i>Cultural sites:</i> archaeological sites, museums, libraries, exhibitions, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Visual arts:</i> painting, sculpture, photography and antiques;</li> <li>• <i>Performing arts:</i> live music, theatre, dance, opera, circus, puppetry, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Publishing and printed media:</i> books, press and other publications;</li> <li>• <i>Audiovisuals:</i> film, television, radio and other broadcasting.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Design:</b> interior, graphic, fashion, jewellery, toys;</li> <li>• <i>New media:</i> architectural, advertising, cultural and recreational, creative research and development (R&amp;D), digital and other related creative services;</li> <li>• <i>Creative services:</i> architectural, advertising, cultural and recreational, creative research and development (R&amp;D), digital and other related creative services.</li> </ul>

### 3.2 CRAFT AND ITS HISTORICAL DEVELOPMENT IN THE CONTEXT OF SUSTAINABILITY

Craft dates back to ancient times and involves a number of activities, disciplines and meanings up to the present. For research purpose, craft is considered as “how to” – the process whereby use of the hands and skills of workers is required for the production of things (Adamson, 2007, pp.3–4). This section presents the historical development of craft in a *global* context with events that affect changes in *local* craft production, as follows:

- Craft and pre-industrialization (before 1750);
- Craft and the Industrial Revolution (ca.1750–1900);
- Craft and mass production (from the 20th Century).

### 3.2.1 Craft and pre-industrialization (before 1750)

The term “pre-industrialization” is used to characterise a time that was unaffected by the major developments and changes that resulted from the Industrial Revolution,<sup>9</sup> which began in England in about 1750 (Walker, 2011c, p.2). The pre-industrial age dates back to ancient times, when everything was made by hand processes, known as “craft” (Lucie-Smith, 1981, p.11). Craft or handmade production was the usual method applied in everyday life for making things such agricultural implements, fishing appliances, baskets, pottery and woven fabrics (Lucie-Smith, 1981).

The medieval and the Renaissance periods contributed significantly to the structures of craft production (Lucie-Smith, 1981, pp.113, 143; Adamson, 2010, p.9).

- **In the medieval period (5th–15th centuries)**, the nature of craft society was that it was usually able to “accelerate change within the society itself”; craftspeople became specialised and professionalised and remained in touch with their domestic roots, as for example in the processes of printing and clock-making (Lucie-Smith, 1981, p.138).
- **In the Renaissance period (14th–17th centuries)** craft relied greatly on the guild system and apprenticeship; it focused largely on producing greater quantities of goods for sale, the division of labour, imposing many rules and regulations on craft workers and methods for time-saving and cost-cutting (Lucie-Smith, 1981, pp.144–146). The system put in place during the Renaissance led to conflicting attitudes between craft and art (Lucie-Smith, 1981, p.8), the latter of which was deemed to be superior. In the seventeenth and especially eighteenth

---

<sup>9</sup> **The Industrial Revolution:** There is agreement that the Industrial Revolution began in England around 1750. The British phase of the Industrial Revolution peaked at about 1850. After then, the USA became prominent and the character changed to greater emphasis on scientific research and technological development. This then, in the mid to late 19<sup>th</sup> century, led to mass production (Walker, 2011c).

centuries, publications about various craft disciplines (of a “how-to” nature) became abundant (Adamson, 2010, p.9).

In fact, scientific advancement had *gradually* replaced handwork even long *before* the Industrial Revolution in the form of mechanical tools and machinery (Lucie-Smith, 1981, p.12), as in these examples:

- Printing and clock-making are believed to have been active in China in the eleventh century, and these inventions arrived in Europe in the late thirteenth century (Lucie-Smith, 1981, p.140);
- Various mechanisms were also used in textile production (Lucie-Smith, 1981, pp.11–12), e.g.
  - Silk-throwing mills in Italy (13th century);
  - Fulling-mills for woollen cloth across Europe (13th century);
  - Automatic looms in London, Holland (1616, 1620);
- Paper mills in Germany (1389) (Lucie-Smith, 1981, p.12).

Some particular crafts in England and Italy had already become industrialised, i.e. silk, cotton and woollen textiles production (Lucie-Smith, 1981; Walker, 2011c, p.4). Two dominant types of craft production methods simultaneously existed: large-scale craft manufacture; and craft cottage (Walker, 2011c, p.3). Different terms have been introduced for these, namely “craft industry” and “craft community”, which refer to craft production according to the individual’s understanding and background in craft contexts.

- **Craft industry** is often used from a Western perspective to describe a kind of production where handwork is integrated with mechanical tools, machinery and technology in a particular place, e.g. a mill or workshop (Lucie-Smith, 1981; Mohanty, 1990; Adamson, 2010, p.3).
- In other parts of the world, especially in North Africa and various parts of Asia, craft production is found to be similar to the pre-industrial society of *medieval Europe*, including its economic, class and family system aspects (Sjoberg, 1955,

p.438). **Craft community** is the more appropriate term for the craft production of this context – rather than the so-called “craft industry” widely used in the perspective of Westerners.

For example, Indian handicrafts “is not an *industry* as the word is commonly understood”, but rather production by the *community*. The purpose of Indian handicrafts is different from the craft industry of Western countries; products are made to serve a “positive need in the daily life of the people” and act as a vehicle of “self-expression” and of “aesthetic” values (Chattopadhyay, 1963, ed. by Adamson, 2010, p.192).

The pre-industrial societies associated with craft fulfil essential political, religious and educational functions, which can be characterised as:

- Having a primitive (folk) and non-industrial foundation (without the stimulus of the Industrial Revolution);
- Agriculture-based, dependent on the production of food and raw materials, slow growth and serving as centres for handicraft manufacturing (Sjoberg, 1955, p.438).

### **3.2.2 Craft and the Industrial Revolution (ca.1750–1900)**

The late 18th and early 19th centuries was the era when new (at that time) knowledge and ideas were popularised among intellectuals,<sup>10</sup> resulting in scientific advancement, machinery and manufacturing (Montagna, 1981).

The Industrial Revolution (agreed to have begun around 1750 in England) is connected with the development of structural changes in craft production which began gradually around two centuries before the mid-eighteenth century villages among craftspeople<sup>11</sup> in the countryside and villages (Montagna, 1981; Lucie-Smith, 1981, p.12; Walker, 2011c, p.3).

England was focusing on economic prosperity, and thus developed systems that offered more productivity, efficiency and profits by manufacturing goods for export and trade (Montagna,

---

<sup>10</sup> **Intellectuals:** e.g. Galileo, Bacon, Descartes and others.

<sup>11</sup> **Craftspeople:** e.g. millwrights, watchmakers, canal-builders and blacksmiths.

1981; Mohanty, 1990; Walker, 2011c, p.4). This precipitated major and problematic changes in England and beyond in the social, politic and manufacturing spheres, which were followed by criticism of and then movements against the system.

### **3.2.2.1 The foundations for the expansion and changes in craft production**

At that time, agriculture was prominent as the English way of life and the source of materials for textile production (Montagna, 1981). The foundations for the expansion of commodities production and trade included:

- Improvement in agricultural techniques and practices for an increased supply of food and raw materials (Montagna, 1981);
- The invention of machinery and mechanisms for manufacturing, e.g. power looms and large-scale spinning for cotton textile manufacturing (Walker, 2011c, p.9);
- The construction of factories equipped with machines for large-scale production (Mohanty, 1990; Walker, 2011c);
- The construction of transport systems, i.e. canals and railways, for transporting goods (Walker, 2011c, p.9);
- Extraction of natural resources, i.e. coke, iron to make steel (Walker, 2011c, p.9).

Changes associated with craft production methods can be characterised as moving from:

- Cottages, guilds or workshops to industrial organisation and capitalism (Walker, 2011c, p.9);
- Domestic handwork, to community-based and outwork production and later to mechanized manufacture (Mohanty, 1990);
- Small- to large-scale production for greater quantities (Lucie-Smith, 1981; Mohanty, 1990).

### 3.2.2.2 Critical views of the Industrial Revolution

The Industrial Revolution is criticised as creating:

- Fundamental changes in the manufacturing and social structure of England, especially in activities which are related to agriculture, textile and metal manufacture, transportation and economic policies (Montagna, 1981);
- Problematic issues of natural resources and structural changes in the areas associated with social, politic and economic considerations in many parts of the world, resulting from colonialism, trade and the exporting of goods from England to Western Europe, then America and eventually around the world (Mohanty, 1990, p.25; Walker, 2011c, p.2).

Industrial manufacture, a system that embedded capitalism, economic benefits, the use of advanced machinery, large-scale manufacture and the division of labour (Schumacher, 1973, 1979), is also criticised as affecting craft production and human value. Industrialisation led to:

- An irreversible decline in traditional crafts, sometimes to the point of extinction (some cited in Adamson, 2010, pp.2, 44);
- The deskilling of craftspeople and the alienation of the workforce (some cited in Adamson, 2010, pp.2, 44);
- Devaluing humanity in terms of thinking, personal meaning, skill development and employment (Schumacher, 1973, 1979), habits and responsibility, soul and aesthetic values (Morris, 1888, ed. by Adamson, 2010, pp.147–148).

It has however been suggested that the term “deskilling” is misleading, because craft skill did not simply erode as a result of industrialization (Braverman, 1974, ed. by Adamson, 2010, p.78). “Rather, it has been continually transformed and displaced into new types of activity” (Adamson, 2010, p.2).



### 3.2.2.3 The Arts and Crafts Movement as a response to industrial manufacture

In response to the changing situation, reformers and preservationists, led by John Ruskin and William Morris, founded the Arts and Crafts Movement to distinguish the importance of aesthetic and handmade objects from machine-made goods (Lucie-Smith, 1981, p.11; Adamson, 2010, p.2). These forms of handicraft production are generally perceived as going against industrialisation, the division of labour and machinery.

- **John Ruskin** suggested “ways forwards by looking backwards”, i.e. to the medieval era, when “an organic synthesis of respect for nature, religious spirit and joyous craftsmanship” could be found, but which was “neglected in modern culture” (Adamson, 2010, p.139). Ruskin called for *the idealization of craft handwork* and elaborated the concept in his books<sup>12</sup> (Lucie-Smith, 1981; p.208). Yet some criticised Ruskin’s concept as an antimodernist vision, romantic and illogical, a fantasy that was disconnected from the reality of trade (cited in Adamson, 2010, p.139).
- **William Morris**, an admirer of Ruskin’s writings, embarked on the revival of handicrafts as a means of production that provides economic and social reforms, along with human integrity and soul (Morris, 1888, ed. by Adamson, 2010, pp.147–148). This campaign was conducted through writing, teaching and business practice that included training in industrial-design (Lucie-Smith, 1981; Adamson, 2010). In general, Morris may superficially be seen as a rebel against machinery and the industrial system (Adamson, 2010). In fact, as some explained, Morris objected to the *misuse* of the machine rather than the machine itself (Lucie-Smith, 1981, p.214).

In addition, the practical consequences of the Arts and Crafts Movement included the establishment of institutions or societies for handicrafts across Britain, Europe and America – for example:

---

<sup>12</sup> **Books by John Ruskin:** *The Seven Lamps of Architecture* (1849) and *The Stones of Venice* (1851-1853); the latter became the foundation of the Arts and Crafts Movement (Lucie-Smith, 1981; p.208).

- *In Britain* – Morris and Co. (1860) for wallpapers and textiles; Guilds or Schools of Handicraft (1880s);
- *In America* – A Women's Pottery Club (1879); the Boston Arts and Crafts Society (1897); and Handicraft Magazine (1902-1904) (Lucie-Smith, 1981, pp.209, 212, 222, 224).

Nevertheless, many groups involved in handicraft production were unable to remain economically viable (Adamson, 2010, p.2). Around the turn of the century, two major dichotomies between *machine*-made and *hand*-made production were widely debated across Britain, Europe and America (Lucie-Smith, 1981; Adamson, 2010).

### **3.2.3 Craft and mass production (from the 20th Century)**

Industrial manufacture is based on advanced machinery with high investment costs, and this requires large-scale production of large quantities of commodities and goods for trade in order to recoup the cost of investment and make a profit. This is known as mass production. The 20th century was a time of different perspectives and debates about craft, namely:

- Art, craft and design as means of production;
- The integration of craft- and machine-based forms of production;
- The effects of mass production at the global level;
- The effects of mass production on craft;
- Craft for the implementation of sustainability.

#### **3.2.3.1 Art, craft and design as means of production**

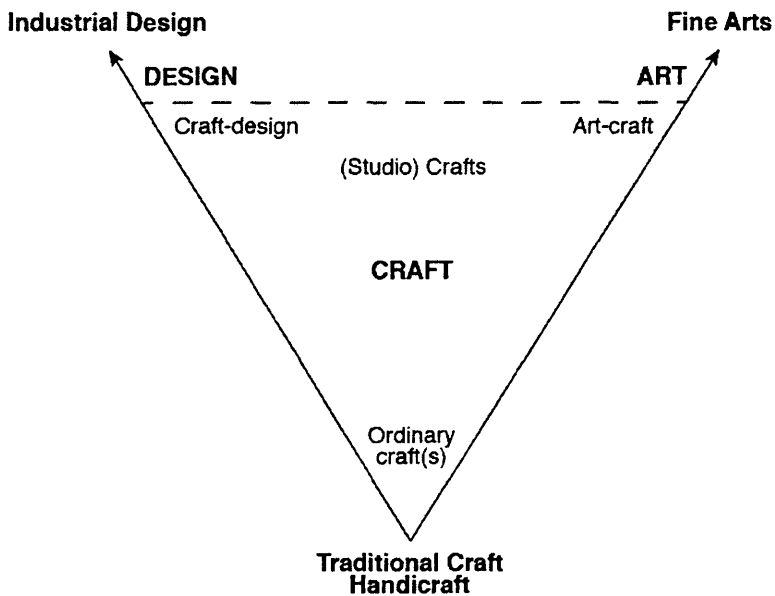
The twentieth century was permeated by conflicting attitudes about *distinguishing* whether an activity was art, craft or design (Busch, 2010, p.113) and *integrating* craft as a part of art and design (Dormer 1997, p.12; Adamson, 2010, p.2).

Craft (specifically traditional craft/handicraft at that time) was situated between art and design; there were two potential directions for craft in a changing world, towards (i) industrial design

and (ii) fine art, and this resulted in the emergence of craft-design and art-craft (Ihatsu, ed. by Harrod, 1997, p.303).

- **Art-craft**, related to idealism and romanticism, emphasised handmaking, aesthetics, quality and individuality (Lucie-Smith, p.185; Busch, 2010, p.113).
- **Craft-design**, in contrast, was associated with industrialism and consumerism and focused on machinery, simplicity, quantity and uniformity for better and cheaper output (Lucie-Smith, p.185; Busch, 2010, p.113).

**Figure 3.1 Two potential directions for craft in a changing world**  
(Figure reproduced as per the original of Ihatsu, ed. by Harrod, 1997, p.303)



These different emphases, in turn, led to the *separation* of studio crafts from design for industry (Alfoldy, 2007, p.41). Craft and design each developed their own ways of producing goods, identities and institutions, and both became contested (Alfoldy, 2007, p.41).

People tried to *distinguish* (if not discriminate between) and assess<sup>13</sup> the actual features, status, interpretations and applications of art, craft and design (and of course their overlapping facets, i.e. traditional craft, fine-art, art-craft, craft-design and industrial design), which raised issues such as class and the division of labour, the disintegration of disciplines

<sup>13</sup> **Assessments** were conducted in various media, e.g. journal articles, international conferences, magazines, exhibitions, associations and their awards for quality crafts.

and the separation between education and skill training (Lucie-Smith, 1981, p.269; Dormer, 1997, p.6; Harrod, 1997).

On the other hand, some argued that craft had always been a *part of* art and design, and the evidence can be traced far back to the medieval era – long before the Industrial Revolution (Adamson, 2010, p.2). Towards the end of the twentieth century, such conflicting attitudes began to be reconciled (Busch, 2010, p.113). People started to consider the terms “art”, “craft” and “design” as an *overlapping* set rather than three distinct (separated and contested) areas (Alfoldy, 2007, p.41).

Nevertheless, in terms of practice and descriptive roles, different views about the skills and roles of craftspeople and designers were presented.

- **Craftsperson and product designer could become one** – Both involve similar roles in consideration of the structure and appearance of objects as well as strategies for making them (Dormer, 1997, p.12). Craftspeople who include design in their process tend to call themselves “designer-craftsmen” or “designer-makers” (Ihatsu, ed. by Harrod, 1997, p.302; Shiner, ed. by Alfoldy, 2007, p.41). Factors that bring craft and design together are the hands, mastery, materials and use (Shiner, ed. by Alfoldy, 2007, p.39). Such craftspeople usually focus on exploring a *particular* area of materials, whereas conventional industrial designers consider *any* number of materials to solve problems (Shiner, ed. by Alfoldy, 2007, pp.39–40).
- **Craftsperson and designer involve different skills and roles** – Some claim that craftspeople and designers have different skills and roles in production; the reality differs from the idealistic concept suggested by some theorists<sup>14</sup> that “craftsmanship and machinery”, “craftsperson and product designer” or “maker and designer” could become one (Shiner, ed. by Alfoldy, 2007, pp.34, 41); what is more, groups of craftspeople and designers do not comfortably merge with one another (Walker, 2011, p.191).

---

<sup>14</sup> **Theorists** who suggested that craftsperson and designer could become one, or saw craft as part of design: e.g. Wright (1927), Ashbee (20<sup>th</sup> century), Dormer (1997), Adamson (2010).

### 3.2.3.2 The integration of craft- and machine-based forms of production

A number of Morris's pupils developed applications of craft to suit their contexts and ways of doing, of which some were not limited merely to the handmade system, nor went against the industrial system. Examples are given below.

- **Ashbee** (cited in Lucie-Smith, 1981, p.241) concluded that “it was useless to rebel against the industrial system” and urged reconstruction from within the *nature* of systems. In addition, he argued that a backward-looking idealism for handcrafted objects would no longer work because:
  - It obviously served the rural community and disregarded an “essential market of urban luxury”;
  - It competed with the passion for antiques, which made it difficult for amateur craftsmen to sell handicrafts of any quality.
  
- **Frank Lloyd Wright**, the greatest architect of the twentieth century (cited in Adamson, 2010, p.107) claimed that Morris underestimated the essential nature of the machine, and Wright declared,<sup>15</sup> “the machine is here to stay” (Lucie-Smith, 1981, pp.226–227). Against the background of various contested perspectives, e.g. idealism, romanticism, industrialism, modernism, simplicity and ideology, Wright (1927, ed. by Adamson, 2010, p.110) emphasised the importance of identifying the “nature” of the machine and delivering “principles rather than expedients”. In addition, Wright provided convincing proof of the idea that craftsmanship and machinery could work together, through materials, simplicity, spirituality and aesthetics, e.g. as furniture and decorative objects in his house, perceived as “architectural sculpture” and having “symbolic significance” (Lucie-Smith, 1981, p.226).

### 3.2.3.3 The effects of mass production at the global level

Industrialisation and mass production could produce goods that went far beyond the basic needs of survival and stimulated desire and the rise of consumerism (Metcalf, 1993, ed. by

---

<sup>15</sup> **Wright declared** in his lecture “The Art and Craft of the Machine”, delivered at Hull House in 1901.

Alfoldy, 2007, p.6). People are dependent on mass-produced goods (Walker, 2011, p.191), driven largely by design for commerce (Clark and Brody, 2009). The expansion of industrialisation and mass-produced goods also raised problematic issues, e.g. social and environmental effects, unemployment, urban migration, the overuse of natural resources, consumerism and disposal via landfill (Schumacher, 1973; Walker, 2006).

During the 1960s, people, especially the younger generation in Western countries, called for responsible action from a number of parties at different levels, especially in relation to environmental and social issues (Walker, 2006, p.20; Bhamra and Lofthouse, 2007, pp.1, 9). There were discourses about “growth”, particularly in the economy and manufacturing (e.g. “no-growth economy”, “steady-state economy”), which gradually coalesced as relatively *acceptable* concepts, namely “sustainability” and “sustainable development” in the 1970s (Walker, 2006, pp.15–16, 20; Bhamra and Lofthouse, 2007, p.9). By the late twentieth century, achieving socio-economic justice and environmental responsibility had become one of the *world’s* major concerns (Schumacher, 1973; Walker, 2006, p.17).

#### **3.2.3.4 The effects of mass production on craft**

As factory-made products became abundant in the marketplace, craft production declined sharply (Metcalf, 1993, ed. by Alfoldy, 2007, p.6). Several kinds of traditional crafts had become extinct and some were in decline, e.g. pottery, weaving, basketry and boat-making (Metcalf, 1993, ed. by Alfoldy, 2007, p.6), and this coincided with the end of the guilds (Alfoldy, 2007, p.3).

A decline in traditional crafts involves the loss of skills and knowledge (Cohen, 2000; UNESCO Bangkok, 2001; Craft Revival Trust, et al., 2005; Wherry, 2008; Clark and Brody, 2009, pp.336, 358; Adamson, 2010, p.43; Jacob, 2012; Nugraha, 2012). Causes for the decline of traditional crafts are as follows:

- Declining demand (Humphreys, 1999; Cohen, 2000; Wherry, 2008);
- Producers’ limited understanding of the urban market (Ashbee, cited in Lucie-Smith, 1981, p.214; Craft Revival Trust, et al., 2005, p.4);

- High cost and time-consuming production (Metcalf, 1993, ed. by Alfoldy, 2007, p.6);
- Shortage of young skilled workers in production (Humphreys, 1999; Cohen, 2000; Wherry, 2008);
- Urban migration (Craft Revival Trust, et al., 2005, p.4), i.e. the young generation tend to move to cities for alternative jobs and the attractions of a “modern” lifestyle (Humphreys, 1999; Cohen, 2000; Wherry, 2008).

To ensure survival, by the late twentieth century crafts were being positioned in the market in response to consumerist values, i.e. in the gifts and home furnishings categories (Metcalf, 1993, ed. by Alfoldy, 2007, p.6), textiles and clothes (UNSD, 2002 in section 3.1.2.4).

### **3.2.3.5 Craft for the implementation of sustainability**

In response to the challenges of the next century, at the United Nations Conference on Environment and Development (UNCED) in 1992, Agenda 21 was agreed upon by a multitude of nations as an action plan for implementing the concept of sustainability through a wide variety of bodies: international corporations, governments, non-governmental organisations and other groups, at global, national and local levels (UNCED, 1992, p.3; Dresnor, 2002, p.41; Bhamra and Lofthouse, 2007, p.12; Charoenmuang, 2007, p.151).

According to the UNCED (1992), Agenda 21 focuses on:

- Social and economic dimensions;
- The conservation and management of resources for development;
- Strengthening the role of major groups (including “business and industry”);
- The means of implementation.

Among other groups,<sup>16</sup> *craftspersons* were mentioned explicitly in relation to the “transfer of environmentally sound technology, cooperation and capacity-building” as well as “developing their corresponding social or managerial support systems” (UNCED, 1992, p.306, item 34.13).

---

<sup>16</sup> **Other groups** include: technicians and middle-level managers, scientists, engineers and educators.

### **3.3 CRAFT AND DESIGN FOR SUSTAINABILITY (THE 21<sup>ST</sup> CENTURY)**

---

In a situation in which traditional crafts, which embrace multiple elements of sustainability, are in decline, design can invigorate the production of handicrafts for their continued future. Craft together with design can act directly and indirectly to influence social change through, e.g., the creation and use of objects (Craft Revival Trust et al., 2005, pp.2, 6, 131; Walker, 2011, p.191).

An increasing number of researchers are looking at the overlapping areas of craft and *design for sustainability* as a way of stimulating production and demand for commodities that: are environmentally responsible, provide skills, satisfying employment opportunities, i.e. "good work" (Schumacher, 1979), offer income generation, especially for local communities (Schumacher, 1979; Nair, 2011, p.51), embrace a material culture that is culturally significant and meaningful (Walker, 2006, p.51) and help in the empowerment of people (Craft Revival Trust, et al., 2005, p.6).

#### **3.3.1 Traditional craft and areas for design contribution**

Many authoritative voices suggest directions for design to contribute to traditional crafts as follows.

- Design to **bridge the gap** between the traditional production of crafts and the changing market environment, i.e. modern markets, for continuation of the craft tradition and the economic viability of craftspeople (Craft Revival Trust, et al., 2005, pp.4–5).
- Design for **value creation**, e.g.:
  - Product design that is functional and meaningful with lasting value (Craft Revival Trust, et al., 2005, p.131; Walker, 2011, p.191);
  - Packaging design for the marketing and delivery of goods (Craft Revival Trust, et al., 2005, pp.4–5, 136).
- Design for **the particularities of localities** (including communities, places, natural resources, material culture) i.e. small-scale production and enterprises (European Conference on Crafts and Small Enterprises, 1994, 1997; Walker,



2006, p.51; UNIDO, 2007; UNCTAD, 2008) with appropriate technology that can contribute to sustainability (Schumacher, 1973, pp.57, 147; UNCED, 1992, p.306, item 34.13; Van der Ryn and Cowan, 1965, pp.13, 85; Craft Revival Trust, et al., 2005, p.138; Walker, 2006, pp.93–97, 2009, p.340; Scruton, 2012, p.399).

- Design for **the preservation of craft** as traditional knowledge and cultural resources, i.e. craft documentation (including motifs, designs, techniques) (Craft Revival Trust, et al., 2005, pp.4–6). Craft documentation can:
  - Record ways of making;
  - Enhance the development of crafts;
  - Address issues of international trade and the protection of Intellectual Property Rights (IPR) ownership, where craft as traditional knowledge is classified under Geographical Indications (GI) (Craft Revival Trust, et al., 2005, pp.4–6).

Craftspeople are a resourceful group with traditional knowledge, which is usually operationalised in the form of verbal knowledge and the making of objects; but this form of knowledge can be lost permanently subject to the life of artisans (Craft Revival Trust, et al., 2005, pp.4–5). There are few documents, and so it is imperative to research, analyse, categorize and document traditional crafts in order to disseminate traditional knowledge to relevant groups of stakeholders (Craft Revival Trust, et al., 2005, pp.4–5).

- Design for **accessibility and exchange of knowledge** about craft,<sup>17</sup> markets and product information among various groups, especially of skilled artisans; this could be delivered in several forms, e.g. a centre for design, craft education and training (Craft Revival Trust, et al., 2005, pp.4–5).
- Design for change in **the interaction between designers and artisans**, which is suggested for a meaningful and long-term relationship, e.g. as creative partners instead of for short-term projects (Craft Revival Trust, et al., 2005, pp.3, 128).

---

<sup>17</sup> **Knowledge about craft:** i.e. ingenuity, useful skills, efficient and productive i.e. techniques, production methods, materials, tools and processes.

Nevertheless, disparities and conflicts remain and the two groups do not comfortably merge with one another, presenting a challenge for design (Walker, 2011, p.191).

### **3.3.2 Examples of craft-based design enterprises for sustainability**

A review of **craft industry worldwide** was conducted, looking into *countries* in which crafts provide economic benefits. According to UNCTAD (2010, p.128), total exports of all art and craft goods reached US\$ 32,323m. in 2008, up from US\$ 17,503m. in 2002. A significant proportion of exports comes from developing countries, accounting for US\$ 20,715m. in 2008, approximately 1.8 times more than from developed countries (UNCTAD, 2010, p.128). Crafts made in Asia, dominated by China, have a leading position in the global market, (UNCTAD, 2008, pp.116–117).

Among *developing* countries, the top ten exporters are China, Hong Kong, Turkey, Korea, India, Taiwan, Thailand, Vietnam, Egypt and Pakistan, in that order, whereas the leading exporters among *developed* countries are Belgium, US, Germany, Italy, France, the Netherlands, the UK, Spain, Austria and Japan (UNCTAD, 2010, p.141, data available to 2008).

This was followed by a review of **craft-based design enterprises**, with the aim to explore business features and development strategies which are congruent with sustainability. Six craft-based design enterprises were selected from a wide range of product categories on the basis of:

- Their involvement in traditional craft;
- The age of the business (i.e. more than 20 years) as an indicator of sustainability;
- Their claims of best practice in craft-based design production.

**Table 3.8 Examples of craft-based design enterprises**

<b>No.</b>	<b>Enterprise</b>	<b>Establishment</b>	<b>Main product</b>	<b>Country</b>
A1	Erzgebirge Crafts	Claimed for inherited skill, ca.15 <sup>th</sup> century	Traditional wooden toys and gifts	Germany
A2	Ermenegildo Zegna	1919	Fabrics and clothes	Italy
A3	Jim Thompson, The Thai Silk Company	1948	Fabrics and interior furnishings	Thailand
A4	David Millor	1954	Metalwork for kitchen utensils	UK
A5	Yothaka	1989	Furniture made using traditional weaving techniques	Thailand
A6	Dedon	1991	Outdoor wicker furniture and industrial crafts	Germany

A review with detailed information about these enterprises can be found in Appendix A, which provides a basis for the analysis of key features as summarised in the table below.

**Table 3.9 Contextual factors of craft-based design enterprises (from six examples)**

Feature	Description
Business operation	<p>Most of the selected cases (four out of six) are family-owned businesses. Types of business operation vary between small, medium and large enterprises. Some parts of production are handled by a production network or business partners in particular places, ranging from local and regional to international levels, e.g.:</p> <ul style="list-style-type: none"> <li>• Studio workshop;</li> <li>• Cottage industry/communities;</li> <li>• Factories for large-scale manufacture.</li> </ul>
Meaning of tradition	<p>Tradition in the context of craft production conveys meaning as follows:</p> <ul style="list-style-type: none"> <li>• Traditional practice and inherited skills and knowledge gained from forefathers in the practice;</li> <li>• Expertise in a particular area;</li> <li>• Long-term success;</li> <li>• History and cultural legacy of community/locality.</li> </ul>
Forces of development	<p>Forces of development are congruent with various elements of sustainability, including:</p> <ul style="list-style-type: none"> <li>• <b>Environmental issues</b>, e.g. the rapid exploitation of natural resources, the protection and conservation of natural resources and the local environment, ecological improvement;</li> <li>• <b>Socio-economic issues</b>, e.g. seeking alternative jobs and/or work methods for better outcomes in many ways, e.g.: <ul style="list-style-type: none"> <li>○ Human well-being, i.e. health and safety concerns;</li> <li>○ Human development, e.g. skills, dignity, ethics;</li> <li>○ Economic viability through long-term employment that provides regular income;</li> </ul> </li> <li>• <b>Cultural issues</b>, i.e. the decline in craft traditions, which are part of the cultural heritage of localities, e.g. district, nation, continent;</li> <li>• <b>Issues of attitude and demand</b>, i.e.: <ul style="list-style-type: none"> <li>○ Negative perceptions towards traditional crafts in comparison with mass-produced goods from factories, e.g. expensive, old-fashioned appearance, occasional use, short lifespan;</li> <li>○ Appreciation of traditional craft and its values, including local wisdom and traditional knowledge;</li> <li>○ Demand for the particular quality of products that affects the production process.</li> </ul> </li> </ul>

**Table 3.10 Craft-based design enterprises and development strategies which are congruent with sustainability (from six examples)**

Feature	Description
Development strategies	<p><b>Business and production management</b></p> <ul style="list-style-type: none"> <li>• To have long-term objectives to ensure continuity</li> <li>• To manage the complete circle of the supply chain (from conception of product, to production, then retailing and finally delivery)</li> <li>• To commit to sustainable development and implement it in business practice, especially in relation to the particularities of localities and well-being of the ecology, e.g. workers, local residents, natural resources, climate</li> <li>• To use renewable energy, e.g. water power for electricity, which contributes to cost efficiency and has environmental benefits – together with the use of natural and renewable resources</li> <li>• To improve/develop in many ways, i.e. through use of better quality raw materials,<sup>18</sup> skills and techniques, production processes, equipment and tools</li> <li>• To produce things of high quality and in volume, e.g. durables</li> <li>• To emphasise the retention and transfer of skills</li> <li>• To include design in the supply chain, i.e. in production and distribution</li> <li>• To incorporate modern technology in production, yet with careful consideration of its effects on the local environment and craftsmanship. (production with human labour needs to be retained in some stages)</li> <li>• To establish direct relationships with original producers and ensure a fair and healthy relationship with business partners at all levels</li> </ul> <p><b>Product design and development</b></p> <ul style="list-style-type: none"> <li>• To design quality products and pursue product development</li> <li>• To design a variety of products in a particular category, e.g. clothes</li> <li>• To design new collections of products in order to stay at the forefront in the market</li> </ul> <p><b>Identity, branding and marketing</b></p> <ul style="list-style-type: none"> <li>• To revitalize craft traditions and foster the continuation of craftsmanship and cultural legacy</li> <li>• To emphasise the originality and history of place and people. This could contribute to the identity of a brand and its products, which would help to distinguish branded products from others in the market.</li> <li>• To offer related services for business expansion and dissemination of the brand and products, e.g. museum, exhibition, restaurant</li> <li>• To retain the brand image</li> <li>• To identify the target market and seek market expansion and a wide range of customers, ranging from domestic to international customers</li> <li>• To embrace the history of localities and tourism as a strategy to promote the brand and expand into new markets</li> </ul> <p><b>Distribution</b></p> <p>To offer multiple channels for product distribution that are accessible to a range of customers as follows:</p> <ul style="list-style-type: none"> <li>• e-commerce and online stores on the Internet and websites</li> <li>• Trading companies or business agents, i.e. exports</li> <li>• Retail stores</li> <li>• Visitor centres</li> <li>• Design museums and cafés</li> </ul>

<sup>18</sup> Materials vary from natural, synthetic, recycled/rediscovered/reclaimed and waste.

### 3.4 CHAPTER SUMMARY

---

This chapter has presented craft in a general and international context and also in the context of sustainability and discussed the relationship between sustainability, design and craft. Six examples of craft-based design enterprises for sustainability are given. Finally, the key findings are summarised in Tables 3.11–3.13 regarding:

- (i) The relationship between sustainability, design and craft;
- (ii) The identification of gaps in sustainability, design and craft;
- (iii) Potential areas of *design for sustainability*.

**Table 3.11 Summary of the relationship between sustainability, design and craft**

Finding No.	Description	References	Section
F3.1	<p><b>Sustainability and design</b></p> <ul style="list-style-type: none"> <li>Industrial design for the mass production of goods for trade is noted to have caused problematic issues in the context of sustainability, e.g. fundamental changes to social structure, consumerism, the overuse of natural resources, environmental damage, unemployment and urban migration in some areas.</li> </ul>	Schumacher, 1973; Walker, 2006, 2011; Alfoldy, 2007; Clark and Brody, 2009	3.2.3.3
F3.2	<p><b>Sustainability and craft</b></p> <ul style="list-style-type: none"> <li>Craft and sustainability are about the ways in which people live in society.</li> <li>Craft production provides multiple benefits compatible with the elements of sustainability, e.g. socio-economic development, cultural heritage, essential humanity and human development, the conservation and management of resources, appropriate technology.</li> <li>The production of and trade in crafts can contribute to sustainability.</li> </ul>	Lucie-Smith, 1981; UNCED, 1992; Harrod, 1997; UNSD, 2002; Adamson, 2007; UNCTAD, 2008, 2010	3.1.1.2 3.1.2 3.1.2.4 3.1.2.5 3.2.3.5 3.3.2
F3.3(a)	<p><b>Design and craft</b></p> <ul style="list-style-type: none"> <li>Craft and design are identified as part of manufacturing and economic activities, e.g. creative industries and the creative economy.</li> </ul>	UNCTAD, 2008	3.1.2.5
F3.3(b)	<ul style="list-style-type: none"> <li>Craft and design overlap in the creation of objects (i.e. the selection of materials and the use of hand skills) and the use of objects.</li> <li>Craft is an activity distinguishable from design, yet it can be part of the design process, i.e. industrial design.</li> <li>Design can contribute to developments in crafts in terms of aesthetics, functional use, customer preferences, potential markets and production technologies, e.g. contemporary crafts.</li> </ul>	Lucie-Smith, 1981; Dormer, 1997; Harrod, 1997; Alfoldy, 2007; Busch, 2010; Adamson, 2010	3.1.2.1 3.2.3.1
F3.3(c)	<ul style="list-style-type: none"> <li>Industrial design and manufacture for mass-produced goods and trade lead to a decline in the production of traditional crafts and the loss of traditional skills and knowledge and human values.</li> </ul>	Schumacher, 1973, 1979; Cohen, 2000; UNESCO Bangkok, 2001; Craft Revival Trust et al., 2005; Alfoldy, 2007; Wherry, 2008; Clark and Brody, 2009; Adamson, 2010; Jacob, 2012; Nugraha, 2012	3.2.2.2 3.2.3.4
F3.3(d)	<ul style="list-style-type: none"> <li>Craft together with design can act directly and indirectly to influence social change for sustainability through the creation and use of objects.</li> </ul>	Schumacher, 1979; Craft Revival Trust et al., 2005; Walker, 2006, 2011; Nair, 2011	3.3

**Table 3.12 Summary of the gaps identified in sustainability, design and craft**

Finding No.	Description	References	Section
F3.4	<ul style="list-style-type: none"> <li>The conception of how things should be made and the reality of how things are made constitutes a gap between theory and practice. Diverse perspectives related to production are described as follows.                             <ol style="list-style-type: none"> <li>Various methods include:                                     <ul style="list-style-type: none"> <li>Hand-based methods;</li> <li>Machine-based methods;</li> <li>The integration of the two.</li> </ul> </li> <li>The roles and skills of the workforce in industrial production are discussed in terms of whether:                                     <ul style="list-style-type: none"> <li>Craftspeople and product designers can have similar roles<sup>19</sup> in production. If so, a person can be trained to acquire both craft and design skills;</li> <li>Craftspeople and designers have different skills and roles in production. These two groups often keep apart and do not merge comfortably with one another.</li> </ul> </li> </ol> </li> </ul>	Lucie-Smith, 1981; Harrod, 1997; Dormer 1997; Alfoldy, 2007; Busch, 2010; Adamson, 2010	3.2.3.1
		Wright as cited in Lucie-Smith, 1981; Dormer, 1997; Harrod, 1997; Alfoldy, 2007; Adamson, 2010	3.2.3.1 3.2.3.2
		Alfoldy, 2007; Walker, 2011	3.2.3.1 3.3.1
F3.5	<ul style="list-style-type: none"> <li>There is a little craft literature<sup>20</sup> which presents craft as an idea and can be used for theory-building. Also, case studies, especially of contemporary crafts/textiles are lacking in design/craft education<sup>21</sup> and research.</li> </ul> <p>Case studies can help to bridge the gap between practice-based and theory-based knowledge.</p>	Adamson, 2007; Roworth-Stokes, 2012	3.1.1.3
F3.6	<ul style="list-style-type: none"> <li>In handicraft production, there is only a small number of young skilful workers. This indicates a gap in knowledge between the generations.</li> </ul>	Humphreys, 1999; Cohen, 2000; Craft Revival Trust et al., 2005; Wherry, 2008	3.2.3.4
F3.7	<ul style="list-style-type: none"> <li>Producers of handicrafts lack understanding of changing demands and potential markets, e.g. the urban market.</li> </ul>	Ashbee as cited in Lucie-Smith, 1981; Humphreys, 1999; Cohen, 2000; Craft Revival Trust et al., 2005; Wherry, 2008	3.2.3.2 3.2.3.4

<sup>19</sup> **Similar roles:** e.g. choosing materials, making objects and making aesthetics.

<sup>20</sup> **Craft literature:** A majority of craft literature is written for promotional purposes and critical discourses, while some presents a historical perspective.

<sup>21</sup> **Design education:** in which craft is included.



**Table 3.13 Summary of potential areas of design for sustainability**

Finding No.	Description	References	Section
F3.8	<ul style="list-style-type: none"> <li>• Design to bridge the gap between producers of handicrafts and potential markets, e.g. urban market, e.g. through product design and development and packaging design</li> </ul>	Craft Revival Trust et al., 2005	3.3.1
F3.9	<ul style="list-style-type: none"> <li>• Design to include localization in the production process, e.g. small-scale craft production with the use of appropriate technologies among local communities</li> </ul>	Van der Ryn and Cowan, 1965; Schumacher, 1973; UNCED, 1992; European Conference on Crafts and Small Enterprises, 1994, 1997; Craft Revival Trust et al., 2005; Walker, 2006, 2009; UNIDO, 2007; UNCTAD, 2008; Scruton, 2012	3.3.1
F3.10	<ul style="list-style-type: none"> <li>• Design to reinforce and enhance knowledge about:               <ul style="list-style-type: none"> <li>• Craft traditions and cultural resources;</li> <li>• Market and product information.</li> </ul>               There is a need for knowledge platforms that allow accessibility and exchange of knowledge among various groups, e.g. between different groups of skilled artisans.             </li> </ul>	Craft Revival Trust et al., 2005	3.3.1
F3.11	<ul style="list-style-type: none"> <li>• Design for change in the interactions between designers and artisans for meaningful and long-term relationships.</li> </ul>	Craft Revival Trust et al., 2005	3.3.1

Chapter 4 will present craft at the *local* level in a particular region of Thailand.

# Chapter Four

## Crafts in Thailand and a Specific Region for Study

### 4.0 INTRODUCTION

---

This chapter presents crafts in Thailand and identifies a specific region for in-depth study. It begins by clarifying the meaning of “craft” and “handicraft” in the Thai context (Section 4.1). This is followed by a discussion of the development of handicraft production from the 19<sup>th</sup> century to the present, including various contextual factors that impact on handicraft production (Section 4.2). Next, some research problems are identified (Section 4.3), and a rationale is presented for northern Thailand as the region for in-depth study (Section 4.4). An investigation into the handicrafts of northern Thailand is reported (Section 4.5), including a classification of crafts (Section 4.5.1) and challenges and opportunities for design (Section 4.5.2). Finally, the key findings are summarised (Section 4.6).

Some of the contents of this chapter were published in conference proceedings in 2012 and 2013 (see below), but have been modified for inclusion in this chapter.

**Table 4.1 List of publications**

Citation of the conference papers	Chapter sections		
	4.3	4.4	4.5
Chudasri, D., Walker, S. and Evans, M. (2013) "Directions for design contributions to the sustainable development of the handicrafts sector in northern Thailand". In: <i>Consilience and Innovation in Design: Proceedings and Program, The 5th IASDR 2013 Tokyo</i> , Shibaura Institute of Technology, Tokyo, Vol.2, pp.585–596.	√	√	
Chudasri, D., Walker, S. and Evans, M. (2012) "An overview of the issues facing the craft industry and the potential for design: with a case study in upper northern Thailand". In: <i>Design Research Society 2012: Bangkok, Conference Proceedings</i> , Chulalongkorn University, Bangkok, Vol.1, pp.314–326.	√	√	√

## 4.1 THE MEANING OF “CRAFT” AND “HANDICRAFT” IN THE THAI CONTEXT

---

Having reviewed a range of academic literature available in English, the author finds that the term “craft” is often used as a subject for critical discourse. Yet in Thailand the term “handicraft” is commonly used. The author therefore raises the question of *whether these terms are the same and which term should be used to fit the context and convey clear meaning?*

Stefan Muthesius (1998, p.120), in his article “Handwerk/Kunsth Handwerk” in “The Craft Reader” edited by Glenn Adamson (2010), suggests an approach to understanding “the complexities of nineteenth- and twentieth-century Western crafts and design” by examining the basic terminology used in different languages and reflecting on it – rather than simply accepting “English translations of foreign words”. Muthesius (1998, p.121) points out, for example, that at the *general* level English and German are “derivative” and “simply the same language”; likewise simply translating literally, a German word such as *Handwerk* as “handiwork” or “hand work” could be misleading and far from the true meaning and common usage.

It is therefore necessary to check carefully the meaning of handicraft and craft in the Thai context and to explain these in English to ensure that the same issue/subject is being discussed across different cultural contexts. A number of differing terms are used across various forms of communication, e.g. verbal discussions, dictionaries, magazines, academic literature and hand-outs – and among various groups of people. Terms relating to craft can be classified into main groups as follows:

- Existing terms;
- Emerging terms.

### 4.1.1 Existing terms in relation to craft

For the first round, a search for existing terms in Thai in relation to craft was conducted in dictionaries. Basically, craft terms stem from the words: “hand” (*hattha* or *meu*) and “work or action” (*ngan* or *kam/kankratam*). In Thai, people usually refer to *thaksa* (ทักษะ) or *fimeu* (ฝีมือ) to mean “skill”, which is translated as “craft” in English. On the other hand, *hatthakham* (หัตถกรรม)

and *ngan fimeu* (งานฝีมือ) are equivalent to “handicraft”, and these mean the *domain* of skilful work for intricate *objects*.

The table below summarises craft terms used in Thai along with their meanings, followed by equivalent English terms.

**Table 4.2 Craft terms used in Thai**  
(Source: Longdo Dict., 2003; The Royal Institute, 2007)

Thai word	Meaning	English synonym
<i>Thaksa</i> (ทักษะ)	Ability to be a sensible recipient of development (Longdo Dict., 2003)	Skill, talent, ability, capability, proficiency, craft (Longdo Dict., 2003)
<i>Fimeu</i> (ฝีมือ)	Capable of using your hands to make things skilfully (Longdo Dict., 2003)	Skill, manual skill, ability, capability, craftsmanship, proficiency, craft (Longdo Dict., 2003)
<i>Ngan Fimeu</i> (งานฝีมือ)	Intricate work done by hand that requires great skill (Longdo-Dict., 2003)	Craft, handiwork (Longdo Dict., 2003); handwork, manual skill, workmanship, dexterity, manufacture, art (Longdo-Dict., 2003)
<i>Hatthakam</i> (หัตถกรรม)	Work done by hand for functional use (The Royal Institute, 2007) – not by machine (Longdo-Dict., 2003).	Handicraft (Longdo Dict., 2003);

For the second round, a search for other terms in relation to craft was conducted in other sources, e.g. academic literature, government reports, magazines and websites. Other terms related to craft were found as follows:

- Art and craft;<sup>1</sup>
- Handicrafts industry, handicrafts sector;
- Handicraft/craft community;
- Handicraft/craft enterprise;
- Industrial design  
(e.g. a course at King Mongkut’s Institute of Technology, Ladkrabang (KMITL));
- Industrial crafts and design  
(e.g. a course at Thammasat University, Lampang Campus);

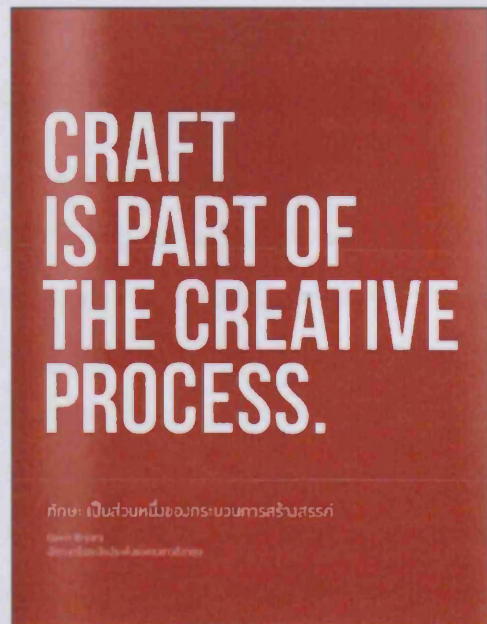
<sup>1</sup> **Art and craft** are closely associated and are often combined to denote a discipline, reflecting the use of term: *sinlapahatthakam* (ศิลปหัตถกรรม).

- Handmade products;
- Commercial crafts, commercialized crafts.

In the context of Thailand, sometimes English is also used in phrases for concepts derived from sources available in English. For example, in Creative Thailand magazine (Thailand Creative and Design Center (TCDC), 2011), in the English sentence “craft is part of the creative process” (quoted from Gavin Bryars), “craft” is translated as *thaksa* (ทักษะ), which means “skill” (TCDC, 2011, p.3). The term “skill” is usually used in association with the terms craftsmanship, craftsman or skilled worker(s), as in the headline “SKILLS: Passing Down the DNA of Crafts Masters” (TCDC, 2011, cover page). In reference to *objects made by hand*, Thai usually uses the term “handicrafts” (*ngan fimeu/hatthakam*) (งานฝีมือ/หัตถกรรม) instead of “crafts”.

**Figure 4.1 Example of the application of a craft-related word**

(Source: Creative Thailand magazine by TCDC, 2011)



#### 4.1.2 Emerging terms in relation to craft

Some craft terms are recently promoted in relation to two main directions for the development of craft. These directions are (i) art-craft and (ii) art-craft with design<sup>2</sup> and new technology.

<sup>2</sup> **Design** is promoted as a discipline that can help to add value to handicrafts, especially in the context of commerce (SACICT, 2011).

Terms used in these directions include both existing words and emerging ones. These indicate an attitude shift and additional direction in the way craft production is viewed.

- **Terms used in the direction of art-craft**

The terms *sinlapahatthakam* (ศิลปหัตถกรรม) (existing term), *hatthasilp* (หัตถศิลป์) and *hatthasilp wijit* (หัตถศิลป์วิจิตร) (emerging terms) are found in local magazines (e.g. in Living Thai magazine) and promotional media at trade fairs in Thailand. The terms can be translated as follows:

- *Sinlapahatthakam:* art (*sinlapa*) and craft (*hatthakam*)
- *Hatthasilp:* art (*silp*) made by hand (*hattha*)
- *Hatthasilp Wijit:* fine (*wijit*) art (*silp*) made by hand (*hattha*)

Examples of handicrafts seen from this perspective include arts and crafts, tribal crafts and ancient arts (The Support of Arts and Crafts International Centre of Thailand (SACICT), 2011, pp.72–73).

- **Terms used in the direction of art-craft with design and new technology**

In 2012, SACICT launched<sup>3</sup> a project called “*Thai Navatasilp: Innovative Art of Thai Craft*” (SACICT, 2012; Pratuangkrai, 2012) to “help local handicraft entrepreneurs adopt new technology and develop creative designs for their products”, including packaging design (Pratuangkrai, 2012). The products of the Thai Navatasilp concept are based on “folk arts and crafts”, “cultural handiwork” and “design” (SACICT, 2012) and the integration of “modern technology into traditional techniques” (SACICT, 2011, p.73). “The industry needs to shift to making value-added products” (SACICT cited in Pratuangkrai, 2012). It aims at promoting Thai handicraft products internationally for export in order to generate income for local workers; yet it no longer focuses on “standard or plain design products” because that market is highly competitive and copycat products are in evidence (Chansilpa cited in Pratuangkrai, 2012). In addition, the term “digital craft” appeared in the Creative Thailand magazine (TCDC, 2011).

---

<sup>3</sup> This project was launched at the International Innovative Craft Fair in March 2012 and the Bangkok International Fair for Gifts and Houseware (BIG+BIH) in October 2012.

## **4.2 THE DEVELOPMENT OF HANDICRAFT PRODUCTION IN THAILAND**

---

The development of handicraft production in Thailand has evolved in relation to two main contextual factors, domestic and international. Domestic variables are often related to government and national development plans. International variables are related to industrialization, globalization and trade in mass-produced goods, which have had a rapid and significant impact on the social structure of Thailand. This section presents the development of handicraft production in Thailand with a brief overview of its development in: the 19<sup>th</sup>, 20<sup>th</sup> and 21<sup>st</sup> centuries, focusing in particular on the period since the 1960s.

### **4.2.1 Handicrafts in the 19<sup>th</sup> century (1801–1900)**

In the nineteenth century, the two primary components of the economy in rural areas of Thailand were agriculture and handicraft production (Bowie, 1992, p.805; Wherry, 2008). Agriculture was a main production for domestic consumption involving the exchange of labour and materials and trade in goods between societies (households, villages and regions) (Bowie, 1992, p.807). For example, people in upland villages exchanged their raw cotton with lowland villagers for rice and other cash crops; and some lowland villagers re-sold raw cotton to others in their villages and to neighbouring areas for the production of woven cotton textiles that required multiple processes and skills, e.g. spinning, yarn colouring and weaving (Bowie, 1992, p.807). Handicraft production provided either primary or secondary jobs, or sometimes both, and thus created employment and income for local people, especially during the off-seasons in the agricultural cycle (Bowie, 1992, p.805; Wherry, 2008). Agriculture (cultivation on the basis of local seasons and the weather) and handicraft production were closely associated in terms of seasonal jobs, natural materials and the workforce.

### **4.2.2 Handicrafts in the 20<sup>th</sup> century (1901–2000)**

From the late twentieth century up to the present, Thailand, a country with well-established elaborate ceremonies and a unique tradition of ornate arts and crafts, has been facing a sharp *decline* in the production of *traditional crafts* (Cohen, 2000, pp.9–10; Wherry, 2008; World Crafts Council: Asia Pacific Region, 2009). Handicraft production and agriculture have been significantly affected by the penetration of industrial manufacture, the import/export of manufactured goods and by globalization and trade (Warren, 1983; Cohen, 2000; Wherry,

2008). There have been *changes* in the way of life, cultural traditions and handicraft production, especially in activities involving tourism (Cohen, 2000; Wherry, 2008).

The first national *Economic Development Plan* was launched in 1961 with a focus on industrial manufacturing as a strategic policy for the country's development (NESDB,<sup>4</sup> 2008). Each plan is usually set for five<sup>5</sup> years for the implementation of various policies. Major policies in the National Economic and Social Development Plans of Thailand in relation to handicraft production are summarized as follows.

**Table 4.3 Major policies in the National Economic and Social Development Plans of Thailand in relation to handicraft production**  
(Source: NESDB, 2008)

	National Economic and Social Development Plans										
	1	2	3	4	5	6	7	8	9	10	11
Strategic policies	1961-1966	1967-1971	1972-1976	1977-1981	1982-1986	1987-1991	1992-1996	1997-2001	2002-2006	2007-2011	2012-2016
Agriculture	√	√	√		√		√				√
Industrial manufacturing	√	√	√	√	√		√				
Commerce and services					√						
Distribution and efficiency of production for development in rural area <sup>6</sup>				√		√	√	√	√	√	
Export, import and tourism promotion				√	√						
Human, social and cultural development						√	√	√	√	√	√
Economic structure reform									√	√	√

- **Handicrafts in the context of export and tax policies**

In the late 1970s and early 1980s, government policies on exports and tax on agriculture led to a critical reduction in wages for farmers, who needed to seek alternative jobs to improve their income (Wherry, 2008, p.36). By the early 1990s, nearly *four* million workers had moved to the cities for factory and construction jobs (Wherry, 2008, p.37). The decline in handicraft

<sup>4</sup> NESDB: Office of the National Economic and Social Development Board.

<sup>5</sup> **Five years:** the first was a six-year development plan, but split into two sub-plans of three years each.

<sup>6</sup> **Distribution and efficiency of production in rural area,** when classified as development for the *public*, is connected with two agendas: "income distribution and rural development" and "people development, job creation, income generation".



production was obviously exacerbated by a fall in the number of agricultural workers (Humphreys, 1999; Wherry, 2008).

- **Handicrafts in the contexts of tourism and commerce**

In 1985, as opportunities in the agricultural economy became scarce, tourism emerged to offer new economic opportunities in Thailand (Wherry, 2008, p.37). At that time, there were many refugees from Laos in refugee camps in the northern and northeastern regions of Thailand whose great range of tribal crafts attracted considerable numbers of tourists (Cohen, 2000, p.2). Thus, the *commercialization of crafts* flourished, especially of the “tribal crafts” of hill tribes in the highlands and the “folk crafts” of villagers in the lowlands. All benefited from both foreign and local tourists (Cohen, 2000; Wherry, 2008, p.37). During the 1980s and 1990s, however, due to the resettlement and repatriation of refugees to third countries, the range of tribal crafts decreased substantially (although some crafts were still produced routinely, using the same processes, forms and styles, in the hill-tribe villages) (Cohen, 2000, p.3).

- **Handicrafts in the context of cultural heritage and tourism**

At the world level, in 1976, the relationship between World Heritage and tourism was made explicit by UNESCO's declaration that tourism was “more than an economic phenomenon with social and cultural effects” and had become “a phenomenon of civilization” (UNESCO, 1976 cited in Peleggi, 1996, p.433). In Thailand, tourism was clearly “an elite activity”, especially in the domain of “cultural tourism” (Peleggi, 1996, p.434).

During the 1980s, “cultural heritage” became a promotional phrase that was used in a number of events, e.g. the Bangkok Bicentennial (1982), the celebrations for the 60<sup>th</sup> birthday of King Bhumibol (1987), “Visit Thailand Year” together with ceremonies for the longest reign in Thai history (1988) and Thailand's Arts and Crafts Year<sup>7</sup> (1988–1989) (Peleggi, 1996, p.435).

---

<sup>7</sup> **Thailand's Arts and Crafts Year (1988–1989)** was set up in order to honour Her Majesty Queen Sirikit for her strong support for the revival and preservation of the national heritage in arts and crafts and for creating job opportunities, especially among people in rural areas, through the “Supplementary Occupation Programme” (Siamstamp, 2003).

In 1991, the ancient cities of Sukhothai and Ayutthaya (in northern and central Thailand respectively) were listed as World Heritage sites, while the forest area of Thung Yai-Huay Khakhaeng was listed as a World Heritage natural site (Peleggi, 1996, p.433). Thailand was widely promoted overseas as a destination for cultural tourism (Peleggi, 1996, p.433). Nevertheless, in 1991–1992, the number of foreign-tourist arrivals decreased for the first time since 1976 due to the world economic recession, the Gulf War (1990–1991) and other invasions in the following years, as well as the gradual opening up of long-isolated countries in the region, e.g. Burma (also called as Myanmar) and Vietnam (Peleggi, 1996, p.436).

The tourism industry could not fulfil the aim of delivering economic prosperity alone, while environmental issues in Thailand were a pressing concern, e.g. the illegal possession of land for resort construction (Peleggi, 1996, p.436), along with various social issues, e.g. sex tours, the spread of AIDS and traffic jams (Peleggi, 1996, p.435). The effects of the tourism industry posed serious questions about “the sustainability of tourism growth” (Parnwell, 1993 cited in Peleggi, 1996, p.436), along with the question of whether heritage sites could effectively attract tourists and their economic spending (Peleggi, 1996, p.437).

Conservationists, i.e. academic groups and social workers, started to oppose the government’s policy on tourism in relation to national heritage (Peleggi, 1996, p.433). Confrontations between various groups involved issues of “different conceptions of the past” and “different models of development”; nevertheless, cultural heritage remained an arena for representing national identity, including traditional crafts produced at authentic sites (Peleggi, 1996, p.433).

- **Handicrafts in the context of industrialisation along with rural livelihoods**

In the 1990s, due to global penetration into local areas of Thailand, craft production had contracted significantly and saw the substitution of mass-produced goods and consequently local handicrafts were produced as a supplementary activity only (Cohen, 2000, p.14). In response to these changes, the national government established the large Ban Thawai Handicrafts Center in Hangdong, Chiang Mai province, in 1990 to serve as a training centre for job creation for villagers so that they could use a place and generate income (as an alternative to farming when it is out of season or to urban migration for other jobs) (Wherry,

2008, p.15). Although, it did in fact serve to concentrate craft retail shops, with businesspeople from Bangkok and elsewhere moving into the centre; shop rents in this “ought-to-be” training centre increased, and many local villagers could no longer afford to run their shops (Wherry, 2008, p.16).

Poverty was severe among people in the rural areas of Thailand, especially in the northern and northeastern regions (Jongeward, 2001) as a result of globalization and the 1997 Asian economic crisis. Among them were artisans who had moved away from traditional livelihoods due to ...

*“...[the] access to raw materials and to markets, exploitation by middlemen, low prices for long hours of work and the devaluing of rural ways of life. ...[People] “became victims of environmental destruction, industrialization, marginalization and displacement as a direct result of the dominant development model [industrialization] promoted in the West and embraced by the Thai government in [the] 1970s, 1980s and early 1990s” (Laird, 2000 cited in Jongeward, 2001).*

- **Handicrafts in the context of Thailand's economic crisis**

In 1997, Thailand faced a severe financial crisis and the collapse of the Thai baht, which affected the Thai economy for several years, particularly the manufacturing sector and commerce (Cohen, 2000, p.3; Wherry, 2008, p.37). Thailand lost the advantage of cheap labour to China and a number of people became unemployed (Wherry, 2008, p.37). Since the mainstream economy (particularly agriculture and industrial manufacturing) was uncertain, the government sought to compete in the global market for economic opportunities by initiating a project for the export of traditional crafts, and particularly those produced by SMEs, to alleviate unemployment and strengthen the capacity of craft production (Department of Industrial Promotion, 1999b, p.2).

#### **4.2.3 Handicrafts in the 21<sup>st</sup> century (2001 to the present)**

In 2001, the government also created programmes to support *local* craft production for commerce, i.e. the OTOP project (One *Tambon* [“District”] One Product) (Wherry, 2008, p.39; Ministry of Culture, 2009). Some entrepreneurs went into craft production for export,

especially of furniture and ceramics (Wherry, 2008, pp.38–39). In 2003, Thailand exported furniture worth US\$377 million (against total world exports of wooden furniture worth US\$14.6 billion) (Wherry, 2008, pp.12–13). As a ceramic exporter, Thailand was ranked the fourth in the world, accountable for US\$137 million of the total world exports of US\$ 1.4 billion (Wherry, 2008, pp.13–14).

Since the beginning of the 21<sup>st</sup> century, the government and the National Economic and Social Development Board (NESDB) have appreciated the importance of structural reform to the Thai economy; and various economic concepts have been included in national plans, e.g. the ideas of a sufficient economy<sup>8</sup> and a creative economy.<sup>9</sup> In 2009, the Prime Minister launched the Creative Thailand programme and in mid–2010 set up a Thai Creative Economy Office (Howkins, 2010, p.5). Human development and creativity were emphasised as core strategies for Thai development in Plan 10 (2007–2011) (TCDC, 2008).

A creative economy is a system that is deemed to integrate culture, economics and technology to fit well in the *present*, based on the existing context of agricultural and industrial manufacturing (TCDC, 2008). Creative industries are the foundation of a creative economy (UNCTAD, 2008, p.15). For Thailand, creative industries involve the production and distribution of products or services based on creative processes and local wisdom (TCDC, 2008), including handicrafts (identified under the “cultural heritage” sector) (Howkins, 2010, p.21).

In 2009, the production of crafts reached a market value of 326,051 million baht (US\$ 9,315 million)<sup>10</sup>, equivalent to 3.6% of the total creative economy (Matichon, 2011, p.101). Nevertheless, the contribution of major crafts to gross domestic product (GDP) contracted. The textiles and apparel sector contracted by 6%, due in large part to reduced export demand, which was affected by its competitors, China and Vietnam, as well as a general global economic downturn (NESDB, 2011, p.4). It had contracted for several consecutive

---

<sup>8</sup> **A sufficient economy** is “a method of development based on moderation, prudence and social immunity” using “knowledge and virtue as guideline in living”; it is based on the fundamental principle of Thai culture. The concept was generally accepted in the 1970s during His Majesty King Bhumibol Adulyadej (Rama Ninth)’s speeches (The Chaipattana Foundation, 2013).

<sup>9</sup> **The creative economy** concept was introduced by John Howkins in 2001. For more details see Section 3.1.2.5.

<sup>10</sup> **Exchange rate:** 35 baht per US\$ (Bank of Thailand, 2015).

years. Wood products, furniture and paper products contracted slightly, by 1.9%, 1.7% and 1.4%, respectively, due to a decline in domestic and export demand and the general economic downturn (NESDB, 2011, p.4).

Recently, art and craft production has been seen as an industry potentially contributing to the country's national economic and social development (UNCTAD, 2008, p.110) by providing employment to over two million workers, of whom half work full time (UNESCO, 2009 cited in Howkins, 2010, p.29). Nevertheless, the value of handicrafts and customer demand are in decline (Anonymous, ca.2010; OSMEP,<sup>11</sup> 2010; NESDB, 2011).

### **4.3 PROBLEM IDENTIFICATION**

---

Most of this section has appeared in conference papers (Chudasri, Walker and Evans, 2012 and 2013), except the last part of Section 4.3.4. However, these papers have been restructured and edited to fit the current context.

#### **4.3.1 Traditional handicrafts in decline**

The literature on handicrafts in Thailand from the 19<sup>th</sup> century to the present shows that the state of handicraft production has been unstable, with rises and declines over time. *Commercial* crafts face problems of supply and demand, while *traditional* crafts are in decline.

The decline in handicraft production (i.e. basketry, lacquerware and handwoven textiles) is apparent in every region of Thailand (Warren, 1983; Cohen, 2000; Wherry 2008). Handwoven textiles, i.e. silk production, which are claimed to: be the best-known example of indigenous handicrafts of Thailand (World Crafts Council: Asia Pacific Region, 2009); represent the cultural heritage of Thailand; and provide economic support to a number of people – have become a “dying craft” and are “rarely passed on to the younger generation” (Graham, 2013, pp.211–212). A sharp decline in handicraft production is particularly severe in the central region, while it is less pervasive in the northern, northeastern and southern regions (Warren, 1983; Cohen, 2000). In some isolated areas in these regions, craftspeople continue to produce items using traditional techniques and forms handed down by their ancestors, especially among the hill tribes of the north and northeast of the country (Cohen, 2000).

---

<sup>11</sup> OSMEP: Office of Small and Medium Enterprises Promotion.

### 4.3.2 A need for sustainable development

Handicraft production in Thailand fluctuates in relation to changes in the commercialization of handicrafts in the international market, which is dependent on *market demand* and *customer preferences* (Cohen, 2000, p.20). Involvement with exports leads to radical “heterogenization” and to the loss of the relationship between the cultural background of the artisans and their handicrafts. Change has taken place, especially in production processes, e.g. the ways in which raw materials and production techniques are disassociated from cultural traditions employed among craft communities in a given location (Cohen, 2000, pp.20–21).

Producing handicrafts is cited as “the least profitable step” in the “long value chains” of handicraft commercialization, as local makers/sellers are unable to market their goods directly to global importer/buyers (Graham, 2013, p.212). With regard to long value chains and profit mark-ups, some have proposed using the Internet as a strategic tool to connect local producers directly to distant marketers/buyers to promote and sell handicrafts; this could provide greater economic prosperity for the local producers of handicrafts (cited in Graham, 2013, p.213). Handicraft producers need sustainable development in many ways and for many reasons, such as economic prosperity, social well-being, cultural preservation and environmental responsibility (Anonymous, ca.2010; OSMEP, 2010; NESDB, 2011).

### 4.3.3 Deficiencies in studies of more recent developments in handicrafts

There are deficiencies in the study of more *recent developments* in handicrafts as opposed to the handicrafts of *former times*, particularly in terms of commercialization (Cohen, 2000, p.1).

“...Only [a] few researchers [have] conducted any systematic work on recent developments in Thai arts and crafts. ” (Cohen, 2000, p.1)

Some Thais see commercialized crafts as “an unretrievable debasement or corruption of Thai crafts, not worthy of serious attention” (Cohen, 2000, p.1). In contrast, Chudasri, Walker and Evans (2012, p.319) suggest that “there is a critical need to integrate traditions in commercial craft-product design ... in order to address sustainability agendas effectively. The relationship between *design for sustainability* and localization is critical – though this is neither well understood nor much emphasized in the field of commercial craft-product design”.

#### 4.3.4 Different perspectives on handicrafts: tradition, commercialization and modernity

*Authenticity* and *tradition* are the components of craft which are acknowledged in Thailand and also widely debated in the international context, e.g. among scholars and marketers (Bowie, 1992; Cohen, 2000; Fine, 2003; Wherry, 2008). In Thailand, these components have been debated from two main perspectives – handicrafts related to (i) unchanging traditions and authenticity for local internal markets and (ii) commercialization for external and often foreign markets (Cohen, 2000, pp.3–4).

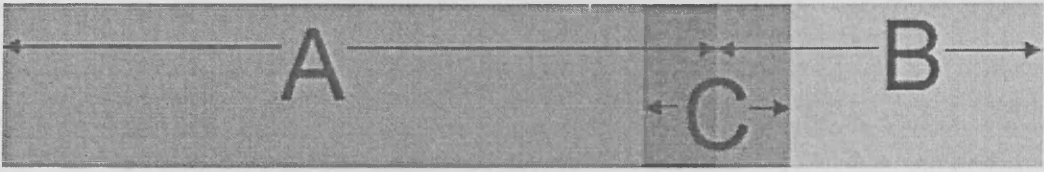
These contradicting perspectives emerged especially after Thailand started to promote handicrafts for their long history and cultural legacy through tourism (1997) (Wherry, 2008). This included a promotional campaign called “Amazing Thailand” that had an image of Old Siam (“The enchanted oriental kingdom, rich in sumptuous ceremonies and ornate arts and crafts”) (Cohen, 2000, p.9). However, some commented that representing Thailand with the image of “Old Siam” distorted the reality of Thailand as a country which embraces industrialisation and modern society; one comment was that this was based on “the collective fear that modernization could destroy the essence of Thainess” (Peleggi, 1996, p.434).

In the handicraft production, those who take **conservative views** give priority to the preservation or revitalization of traditional crafts for their cultural value (Cohen, 2000; Wherry, 2008), e.g. the preservation of traditional *fine* crafts through training programmes which tend not to respond directly to market changes and customer preferences (Cohen, 2000, p.19). In contrast, the group of **commercial views** focuses on the adaptation of traditional craft skills and traditional crafts with a focus on greater production volumes for greater economic viability (Cohen, 2000; Wherry, 2008). The transition of traditional crafts towards commercialization, especially in the context of modernity, is rather complex and varied, yet differentiable by style (Cohen, 2000, p.4). Yet the handicraft producers embracing these approaches face a common problem of unstable demand and uncertainty about their continued future (Chudasri, Walker, Evans, 2013, p.588).

Some researchers have investigated commercial crafts in terms of “tradition” and “modernity”, for example, Graham’s research into the themes and perceptions of Thai silk enterprises

presented in commercial markets worldwide. Graham (2013, pp.215–216) analyses the textual and visual contents of 97 websites<sup>12</sup> and identifies three main categories of the brand images, namely “traditional and non-modern”, “contemporary” and “modern”.

**Figure 4.2 The images of Thai silk enterprises, between “tradition” and “modernity”**  
 (Source: Reproduced as per the original in Graham, 2013, p.216)



- A: “Websites that use the words ‘tradition’, ‘culture’, ‘village’ or ‘natural’ (44 websites)”
- B: “Websites that use the words ‘modern’, ‘contemporary’ or ‘foreign’ (20 websites)”
- C: “Websites that fall into both categories (9 websites)”
- “Note: 24 websites fall into none of these categories.”

Within category A, a few subthemes can be found together with differing perceptions of each theme. In category B, quite a few websites promote brands with contemporary and/or modern themes.

**Table 4.4 Themes of Thai silk enterprises and perceptions of their brand images**  
 (Source: Reproduced as per the original in Graham, 2013, pp.216–223)

Subthemes	Perceptions
<b>Category A: “Authentic and traditional”</b>	
“Emphasizing difference and promoting authenticity”	<ul style="list-style-type: none"> <li>▪ Difference, authenticity, exotic, ethnic, non-modern</li> <li>▪ “Continuity” of Thailand from a period before “globalization” (prior to the late twentieth century)</li> <li>▪ Impression of a person with a particular culture disconnected from the outside world, untouched and isolated</li> <li>▪ Non-Westernness and orientalism</li> </ul>
“Preserving traditions”	<ul style="list-style-type: none"> <li>▪ “Enabling the reproduction of traditions that might otherwise cease to be reproduced”</li> <li>▪ Indicating the continuity of traditional practices in Thailand from centuries ago, which are identical to pre-industrial production practices</li> <li>▪ The hand-made nature of production in rural places</li> </ul>
“Preventing rural to urban migration”	<ul style="list-style-type: none"> <li>▪ Rural production and enterprises that can generate viable income for people in their own locality</li> <li>▪ An alternative job that can help to prevent urban migration and prostitution through educational and occupational training – via “the instrumental value of support”</li> <li>▪ Production that helps to strengthen family and community cohesiveness</li> </ul>
<b>Category B: “Contemporary and modern”</b>	
N/A	<ul style="list-style-type: none"> <li>▪ Design or style</li> <li>▪ Application of new technology</li> <li>▪ Exquisite products and luxury brands from Thailand</li> <li>▪ Competition with other firms based on quality, efficiency and reputation</li> <li>▪ Cleanliness and sleekness of the production workplace</li> </ul>

<sup>12</sup> The websites are currently limited to those using English for communication.



#### **4.4 NORTHERN THAILAND – A SPECIFIC REGION FOR STUDY**

---

The contents of this section appeared in conference papers (Chudasri, Walker and Evans, 2012 and 2013), but have been restructured and edited to fit the current context.

Northern Thailand is identified as the area strongest in handmade production, with a high density of small- and medium-sized enterprises (SMEs) (OSMEP, 2010). Handicraft production in this region contributes significantly to the region's historical and cultural heritage, local knowledge associated with nature and to local consumption, employment and income generation as an alternative to urban migration (Wherry, 2008; Ministry of Culture, 2009; OSMEP, 2010) – all of which are congruent with major elements of sustainability.

This region includes nine provinces of Chiang Mai, Chiang Rai, Lamphun, Lamphun, Mae Hong Son, Nan, Phayao, Phrae and Uttaradit. Historically, it constituted the Kingdom of Lanna for more than seven hundred years from the thirteenth century and developed a unique art and culture (Bowie, 1992; Lannaworld.com, 2006). Much of Lanna art and craft has remained due to the people's traditional ways of living, especially among its hill tribes (Suriya et al., 2007; Ministry of Culture, 2009; OSMEP, 2010).

The question is thus “*what are the potential areas of design for sustainability in the handicraft production of northern Thailand?*” and this is explored in the remainder of this chapter.

#### **4.5 INVESTIGATION INTO HANDICRAFTS IN NORTHERN THAILAND**

---

The contents of this section appeared in a conference paper (Chudasri, Walker and Evans, 2012), but have been modified for inclusion in this chapter. A classification of crafts in northern Thailand is presented, followed by the identification of challenges and opportunities facing *design for sustainability*.

#### 4.5.1 Classification of crafts in northern Thailand

Information has been compiled from information about crafts from the literature<sup>13</sup> and inquiries with experts<sup>14</sup> and classified in an inventory (see Table 4.5). Various ways<sup>15</sup> to classify crafts are presented, namely on the basis of (i) materials, (ii) skills and processes, (iii) products, (iv) market value and (v) market channels and customers.

**Table 4.5 Classification of crafts in northern Thailand**

<b>Materials<sup>16</sup></b>	<b>Skills and processes<sup>17</sup></b>	<b>Products<sup>18</sup></b>	<b>Market value<sup>19</sup></b>	<b>Market channels and customers<sup>20</sup></b>
<b>Animal-based</b> <ul style="list-style-type: none"> <li>• Silk (textile)</li> </ul>	<b>Sketching</b> <ul style="list-style-type: none"> <li>• Drawing</li> <li>• Pattern-making</li> </ul>	<ul style="list-style-type: none"> <li>• Beads</li> <li>• Candles</li> <li>• Christmas decorations</li> </ul>	<b>High-end</b> <ul style="list-style-type: none"> <li>- Traditional fine crafts</li> </ul>	<b>Customer channels</b> <ul style="list-style-type: none"> <li>• <i>Domestic</i> <ul style="list-style-type: none"> <li>- Domestic tourists</li> <li>- Foreign tourists</li> <li>- Expatriates</li> </ul> </li> <li>• <i>Tourist</i> <ul style="list-style-type: none"> <li>- Domestic tourists</li> <li>- Foreign tourists</li> </ul> </li> <li>• <i>Export</i> <ul style="list-style-type: none"> <li>- Indirect (tourists)</li> <li>- Direct (shipment to customers abroad)</li> </ul> </li> </ul>
<b>Plant-based</b> <ul style="list-style-type: none"> <li>• Bamboo and wicker</li> <li>• Cotton (textile)</li> <li>• Wood</li> <li>• Mulberry paper</li> </ul>	<b>Forming</b> <ul style="list-style-type: none"> <li>• Casting</li> <li>• Modelling</li> <li>• Moulding</li> <li>• Pottery-making</li> <li>• Sculpting</li> <li>• Turning</li> </ul>	<ul style="list-style-type: none"> <li>• Furniture</li> <li>• Games</li> <li>• Gardenware</li> <li>• Garments</li> <li>• Gifts</li> <li>• Home decoration</li> <li>• Household</li> <li>• Jewellery</li> <li>• Lacquerware</li> <li>• Miniatures</li> <li>• Painting</li> <li>• Potpourri</li> <li>• Souvenirs</li> <li>• Stationery</li> <li>• Toiletries</li> <li>• Toys</li> <li>• Umbrellas</li> </ul>	<b>Medium-high</b> <ul style="list-style-type: none"> <li>- Artisanal crafts</li> </ul>	
<b>Clay and ore</b> <ul style="list-style-type: none"> <li>• Ceramics and earthenware</li> <li>• Gem stones</li> <li>• Metal</li> </ul>	<b>Decoration</b> <ul style="list-style-type: none"> <li>• Carving</li> <li>• Embossing</li> <li>• Engraving</li> <li>• Etching</li> <li>• Printing</li> <li>• Weaving</li> <li>• Yarn colouring</li> </ul>		<b>Low-medium</b> <ul style="list-style-type: none"> <li>- Commercial crafts</li> </ul>	
<b>Synthetics</b> <ul style="list-style-type: none"> <li>• Natural synthetics</li> <li>• Synthetics</li> <li>• Recycled material</li> </ul>	<b>Finishing</b> <ul style="list-style-type: none"> <li>• Gilding</li> <li>• Lacquering</li> <li>• Painting</li> <li>• Surface inlaying</li> </ul>		<b>Low</b> <ul style="list-style-type: none"> <li>- Mass production crafts</li> </ul>	<b>Importers</b> <ul style="list-style-type: none"> <li>• Europe</li> <li>• USA</li> <li>• Japan</li> <li>• China</li> <li>• Singapore</li> <li>• Hong Kong</li> <li>• Malaysia</li> </ul>

<sup>13</sup> **Literature review:** Bowie, 1992; Humphreys, 1999; Cohen, 2000; Wherry, 2006; UNIDO, 2007; OSMEP, 2009; Department of International Trade Promotion, 2012.

<sup>14</sup> **Inquiries with experts** were conducted in 2011 and 2012 with two informants involved in the field of handicrafts.

<sup>15</sup> **Various ways to classify crafts:** Adamson, 2007; UNIDO, 2007; two informants involved in the field of handicrafts (2011, 2012).

<sup>16</sup> **References:** Department of Industrial Promotion, 1999a, 1999b; NOHMEX, 2009; Bassett, 2010.

<sup>17</sup> **References:** Department of Fine Arts, 2006; ChangSipmu.com, 2009.

<sup>18</sup> **References:** Department of Industrial Promotion, 1999a, 1999b; NOHMEX, 2009; Howkins, 2010; Department of International Trade Promotion, 2012.

<sup>19</sup> **References:** UNIDO, 2007.

<sup>20</sup> **References:** Humphreys, 1999; Cohen, 2000; UNIDO, 2007; OSMEP, 2009; two informants involved in the field of handicrafts (2011, 2012).

- **Market value**

Product appearance, production and product quality are key to justifying the value and types of crafts in the marketplace (UNIDO, 2007, pp.29–30). The relationships between crafts and markets are identified as follows.

- *“High-end market” and “traditional fine crafts”*

Fine crafts embody ethnic and cultural heritage and are considered to be “works of art”; they are often produced as unique or one-off pieces and may be “exhibited in museums and art galleries” or “purchased by collectors”. High-end crafts have high value but are produced in low numbers (UNIDO, 2007, pp.29–30).

- *“Medium-high market” and “artisanal crafts”*

In producing artisanal crafts, artisans “may work with design consultants” to adapt “their work to [meet market] requirements”; “ethnic appearance and historical background” are retained through the use of “traditional elements”; large-volume production may be possible if planned, and outlets include speciality stores, exhibitions and design centres (UNIDO, 2007, pp.29–30).

- *“Low-medium market” and “commercial crafts”*

Commercial crafts are made in traditional ways but adapted to suit buyers’ preferences with support from mainstream buyers or designers; they can be produced in large volumes for mass markets; outlets include speciality stores, exhibitions, design centres, lifestyle shops, importers, tourist shops and mainstream buyers (UNIDO, 2007, pp.29–30).

- *“Low-medium market” and “manufactured/mass-produc[ed] crafts”*

Crafts are designed for mass production, using machines or large networks of artisans; they reflect trends rather than traditions, although they could retain some ethnic appearance through e.g. patterns; they are designed specifically to be distributed through such outlets as tourist shops, mainstream buyers and global chains (UNIDO, 2007, pp.29–30).

- **Market channels and customers**

The domestic market is the main market for the commercialization of handicrafts (Cohen, 2000, p.20). This includes the tourism and leisure markets (Howkins, 2007; Wherry, 2008). Domestic customers include middle-class people living in urban areas, tourists, middlemen and shopkeepers (Cohen, 2000, pp.15, 20).

Foreign tourists prefer objects that are useful, decorative or otherwise suit their lifestyle, while being less concerned with authenticity or tradition (Cohen, 2000, p.20). Souvenir products are sold in significant numbers to foreign tourists in Thailand (Suriya et al., 2007, pp.2, 4–5). Female expatriates in Bangkok are main supporters of handicraft organizations, especially Japanese, British and Americans (Humphreys, 1999, p.57). Yet crafts continue to expand in global markets through export (UNIDO, 2007, p.32). The largest craft-importing countries are those in the European Union, the USA and Japan. At the regional level, China, Singapore, Hong Kong and Malaysia are main importers (OSMEP, 2009).

#### **4.5.2 Challenges and opportunities for design**

There are various areas in which design could potentially contribute to the viable future of handicraft production in northern Thailand, especially in relation to the retention of craft traditions and the cultural heritage of Thailand.

- **Retention and development of craft skills i.e. in craft masters and the younger generation**

Handicraft enterprises face a *shortage of skilled labour* (Howkins, 2010; SACICT, 2010; OSMEP, 2010), e.g. basket-makers in Maehongson and Chiang Mai (Cohen, 2000) and weavers in northern Thailand (Humphreys, 1999; Cohen, 2000). Young women are tending to leave local weaving and textile production for a variety of reasons, including limited and unreliable markets, impatience with complex, time-consuming and repetitive procedures of production and a desire for freedom and financial independence (Humphreys, 1999, pp.56–59, 61).

Areas in need of *skills development* include woodworking and painting in order to meet international standards (TCDC, 2011, p.18). Areas in need of *the retention of skill at an exceptionally high level* include welding, jewellery-making and dressmaking (Thai artisans have won many awards for best practice in international competitions) (TCDC, 2011, p18). Capacity building will inevitably be required for artisans to compete in globalised markets involving free trade and the use of technology (Laisatrulalai in TCDC, 2011, p.5).

- **Collaboration between craft and design**

There is a need for collaboration between master artisans (i.e. in traditional art and the folk crafts) and the younger generation of designers to achieve “the fusion of Thai cultural heritage with the current global trends” (SACICT, 2011). A combination of production and distribution activities is very important if craft enterprises are to become commercially successful in the market (UNIDO, 2007, p.17). Designers could help to connect local producers with wider groups of customers, e.g. through product design and development based on traditional crafts and marketing (UNIDO, 2007, p.35). However, a challenge is that, in general, designers and makers usually work in separate places and with different practices (Shiner, ed. by Alfoldy, 2007, p.34).

- **Knowledge and information about potential markets and customers**

Craft enterprises face a lack of knowledge and information about markets and buyers (Howkins, 2010; OSMEP, 2010; Anonymous, ca.2010). Few companies know how to satisfy distributors’ or buyers’ demands, particularly in tourist and export markets (Howkins, 2010, p.29). A classification into two distinct markets, “internal and external” [domestic and export], is insufficient; sub-categories have to be identified, e.g. domestic markets involving Thai and foreign tourists and export markets for customers abroad (Cohen, 2000, p.20).

- **Product design and development for target customers**

Handicrafts produced without a design direction usually results in customers forming poor impressions of handicrafts (Suriya et al., 2007), as being e.g. old-fashioned in

appearance, ubiquitous imitations without creativity and unique identity, of poor quality at a low price points and being impractical (Anonymous, ca.2010; OSMEP, 2010). To improve the opportunities for enterprises to achieve upper-market value and increase their market share, they have been advised to compete on quality, not just on price, through product design and development (UNIDO, 2007, p.33; OSMEP, 2010; Howkins, 2010, p.40).

- **Developments in small-scale production in relation to product design and development and brand creation**

Small-scale production gives designers and craft-producers greater flexibility to experiment in product innovation and materials (Bassett, 2010). Advanced technology may be introduced in production processes to enhance quality and expand the choice of materials (Ryalie, 2009; Bassett, 2010). There are opportunities for local producers to shift away from being “Original Equipment Manufacturers”<sup>21</sup> (OEMs) to “Original Design Manufacturers” (ODMs) by employing design in production processes for production development, product design and development, which would offer the products of their-own designed and branding (Ryalie, 2009, p.20).

- **Handicrafts with market potential**

Generally, furniture, home decoration, gifts, toys, garments and jewellery have high market share, i.e. export (UNIDO, 2007; Ministry of Culture, 2009; OSMEP, 2010). Jewellery and toys are frequently traded, with high volumes of exported goods (UNCTAD, 2009, cited by Howkins, 2010, p.20). Carpets, celebration items, yarn products and wickerwork are considered to have great opportunities to enter global markets (UNCTAD, 2008, p.116). Products advertised as being environmentally friendly and fairly traded can also have an advantage (UNIDO, 2007, p.33).

Textiles and wooden furniture also have potential, but require special attention in terms of market and business development (UNIDO, 2007; Ministry of Culture, 2009; OSMEP, 2010; Howkins, 2010).

---

<sup>21</sup> **Original Equipment Manufacturers (OEMs):** manufacturers that produce products or parts for contracted companies or retailers under those contractors' brand names or rights.

For local textile production, Humphreys suggests that craft-based organizations:

- a) Run more marketing and design training programmes in order to develop new products using existing skills;
- b) Find appropriate markets with lucrative incomes for the younger workers (Humphreys, 1999, p.62).

## **4.6 CHAPTER SUMMARY**

---

This chapter has presented crafts in Thailand, and covers the meaning of “craft” and “handicraft” in the Thai context, the development of handicraft production from the 19<sup>th</sup> century to the present, research problems and a rationale for northern Thailand as the region for in-depth study. These are followed by an investigation into handicrafts in the region, focusing on the classification of crafts and the challenges and opportunities for design. Finally, the key findings are summarised in Tables 4.6–4.8 regarding:

- (i) The relationship between sustainability, design and craft;
- (ii) The identification of gaps in sustainability, design and craft;
- (iii) Potential areas of *design for sustainability*.

**Table 4.6 Summary of the relationship between sustainability, design and craft**

Finding No.	Description	References	Section
F4.1	<p><b>Sustainability and design</b></p> <ul style="list-style-type: none"> <li>• N/A</li> </ul> <p><b>Sustainability and craft</b></p> <ul style="list-style-type: none"> <li>• Handicraft production offers benefits for local people, especially in rural areas, in many ways which are congruent with major elements of sustainability, including:                             <ul style="list-style-type: none"> <li>○ Economic development via employment and income generation (as primary or secondary jobs, or sometimes both);</li> <li>○ Human and social developments, e.g. skills training, strengthening the relationship within and between communities.</li> </ul> </li> </ul> <p>Beyond its contribution to socio-economic areas, handicraft production also contributes to the cultural heritage and identity of Thailand.</p>	<p>Bowie, 1992; Peleggi, 1996; Cohen, 2000; Wherry, 2008; UNCTAD, 2008; Ministry of Culture, 2009; OSMEP, 2010; Howkins, 2010; Pratuangkrai, 2012</p>	<p>4.1.2 4.2.1 4.2.2 4.2.3 4.4</p>
F4.2	<ul style="list-style-type: none"> <li>• Over time, handicraft production in Thailand has become unstable, and has recently started to decline.</li> <li>• Demand for major crafts has contracted. Traditional crafts have been in sharp decline. The value of handicrafts is undermined.</li> <li>• These developments result from various factors, i.e. the penetration of mass-produced goods, globalization and trade. Handicraft production is in need of sustainable development.</li> </ul>	<p>Warren, 1983; Cohen, 2000; Wherry, 2008; World Crafts Council: Asia Pacific Region, 2009; Anonymous, ca.2010; OSMEP, 2010; NESDB, 2011</p>	<p>4.2.2 4.2.3 4.3.1 4.3.2</p>
F4.3	<p><b>Design and craft</b></p> <ul style="list-style-type: none"> <li>• Designers and craftspeople can be connected via developments in production, product design and development for value creation and distribution of handicrafts in markets.</li> </ul>	<p>UNIDO, 2007</p>	<p>4.5.1</p>



**Table 4.7 Summary of the gaps identified in sustainability, design and craft**

Finding No.	Description	References	Section
F4.4	<ul style="list-style-type: none"> <li>• There are gaps in <b>handicraft enterprises</b>, especially those based on traditional production, including:               <ul style="list-style-type: none"> <li>○ Shortage of skilled labour, i.e. among the younger generation;</li> <li>○ A need for collaboration between craft and design;</li> <li>○ A lack of knowledge and information about potential markets and customers;</li> <li>○ A need for product design and development relevant to target customers;</li> <li>○ A need for development in small-scale production in relation to design.</li> </ul> </li> </ul>	<p>Humphreys, 1999; Cohen, 2000; Howkins, 2010; Anonymous, ca.2010; OSMEP, 2010; Graham, 2013</p> <p>Cohen, 2000; Suriya et al., 2007; UNIDO, 2007; Ryalie, 2009; Bassett, 2010; Howkins, 2010; Anonymous, ca.2010; OSMEP, 2010; SACICT, 2011; Graham, 2013</p>	<p>4.3.1 4.5.2</p> <p>4.3.2 4.5.2</p>
F4.5	<ul style="list-style-type: none"> <li>• <b>Conflicting perspectives</b> towards <b>development directions</b> for handicraft production are obvious and seem to obstruct the handicrafts sector from pursuing sustainable development.               <ul style="list-style-type: none"> <li>(i) Conservative groups give priority to handicrafts for the preservation of cultural traditions.</li> <li>(ii) Commercial groups focus on the adaptation of traditional crafts for commercial purposes and economic viability.</li> </ul> </li> </ul>	<p>Cohen, 2000; Wherry, 2008; Chudasri, Walker and Evans, 2013</p>	<p>4.3.4</p>
F4.6	<ul style="list-style-type: none"> <li>• There is insufficient <b>systematic research</b> into the production and commercialization of handicrafts which takes of <i>more recent</i> developments.</li> </ul>	<p>Cohen, 2000</p>	<p>4.3.3</p>

**Table 4.8 Summary of potential areas of design for sustainability**

Finding No.	Description	References	Section
F4.7	<p>Handicraft producers and enterprises, i.e. small-scale are in need of sustainable development to which design can contribute in many areas as follows:</p> <ul style="list-style-type: none"> <li>• Materials exploration and development;</li> <li>• Skills development and retention;</li> <li>• Production development (process, technology, product quality);</li> <li>• Product development for value creation;</li> <li>• Branding and marketing;</li> <li>• Distribution channels.</li> </ul> <p>These can be done via development projects involving collaboration among various groups, i.e. master artisans, young designers, young craft-practitioners and customers.</p>	<p>Anonymous, ca.2010; OSMEP, 2010; NESDB, 2011</p> <p>Humphreys, 1999; UNIDO, 2007; Ryalie, 2009; OSMEP, 2010; Howkins, 2010; Bassett, 2010; SACICT, 2011, 2012; TCDC, 2011</p>	<p>4.3.2</p> <p>4.1.1</p> <p>4.1.2</p> <p>4.5.2</p>
F4.8	<p>Design can engage with product categories with strong market potential as follows:</p> <ul style="list-style-type: none"> <li>• Furniture, wickerwork;</li> <li>• Home decoration, carpets;</li> <li>• Gifts, toys, celebration items;</li> <li>• Garments, textiles, yarn products;</li> <li>• Jewellery.</li> </ul>	<p>UNIDO, 2007; UNCTAD, 2008; Ministry of Culture, 2009; OSMEP, 2010; Howkins, 2010</p>	<p>4.5.2</p>

Chapter 5 will consider the key findings from Chapters 2–4 as a whole in order to formulate conclusions and identify research questions.

# Chapter Five

## Conclusion from the Key Findings of the Literature Review and Research Questions

### 5.0 INTRODUCTION

---

The chapter summarises all the key findings of the literature review, including sustainability and design (Chapter 2), craft in general and in the context of sustainability (Chapter 3) and crafts in Thailand and a specific region for study (Chapter 4) with respect to three subjects for analysis (relationships, gaps and areas for development) (Section 5.1). It then formulates conclusions (Section 5.2) and finally presents a statement of the research aims and the research questions as guidelines for field research (Section 5.3).

### 5.1 SUMMARY OF THE KEY FINDINGS FROM THE LITERATURE REVIEW CHAPTERS

---

The key findings from the literature review Chapters are presented here under three headings:

- The relationship between sustainability, design and craft (Table 5.1);
- The identification of gaps in sustainability, design and craft (Table 5.2);
- Potential areas of *design for sustainability* (Table 5.3).

**Table 5.1 Key findings relating to the relationship between sustainability, design and craft**

Subject code	Description	Finding reference
<b>Positive relationship between sustainability, design and craft</b>		
R1	Sustainability, design and craft work together in the way they influence the way we live in society, especially in human interaction with objects, whether for their creation, commercialization or utilization.	F2.1(a); F2.3(a); F3.3(b)
R2	<p>The traditional practices of craftspeople in making handicrafts in their local area are compatible with sustainability in many respects, e.g.:</p> <ul style="list-style-type: none"> <li>• Socio-economic development;</li> <li>• Essential humanity and human development;</li> <li>• Cultural heritage as a basis of national identity;</li> <li>• The conservation and management of local resources;</li> <li>• The technologies appropriate to localities.</li> </ul>	F2.2; F3.2; F4.1
R3	Craft and design activities are identified as being part of the manufacture of goods as an economic activity. Both can foster social change for sustainability, especially through our interaction with objects which are used in our daily lives.	F3.3(a); F3.3(d)
R4	Design can make radical and positive changes to society through activities involved in the manufacturing and commercialization of objects, if all the elements of sustainability are taken into account in design. Yet <i>design for sustainability</i> is rarely addressed in design briefs.	F2.1(b)
R5	Design can ensure the viability of handicraft producers who employ traditional processes, for example through product design and development (e.g. contemporary crafts), production development, marketing and sales and product distribution.	F3.3(b); F4.3
<b>Design and related areas as obstructing sustainability and craft</b>		
R6(a)	<p>Design for industrial manufacture, mass-produced goods and commerce, driven largely by marketing for increasing demand and profits, can:</p> <ul style="list-style-type: none"> <li>• Create a number of unsustainable activities (such as the overuse of limited natural resources, overconsumption and consumerism, increased waste in landfill, the devaluing of essential humanity, unemployment and urban migration);</li> </ul>	F3.1
R6(b)	<ul style="list-style-type: none"> <li>• In the context of Thailand, affect a sharp decline in: <ul style="list-style-type: none"> <li>○ The traditional production of handicrafts and their value;</li> <li>○ Traditional knowledge and skills and human values;</li> <li>○ The long-term viability of handicraft production and enterprises.</li> </ul> </li> </ul>	F2.3(b); F3.3(c); F4.2

**Table 5.2 Key findings relating to gaps in sustainability, design and craft**

Subject code	Description	Finding reference
<b>Gaps in sustainability and design in an international context</b>		
G1	There is a need to nurture a deep understanding of sustainability (including <i>design for sustainability</i> ) among various groups of stakeholders, especially in the manufacturing and commercial sectors.	F2.5
G2	There is little evidence of <i>design for sustainability</i> which demonstrates all the elements of sustainability in relation to product design and development, manufacturing and commerce.	F2.4
<b>Gaps in craft in an international context</b>		
G3	There is little craft literature which presents craft as an idea and can be used for theory-building. The majority of craft literature is written for promotional and critical discourse purposes, and only a small proportion offers a historical perspective.	F3.5
G4	Case studies, which could help to bridge the gap between knowledge gained from practice in the field and knowledge learnt from theoretical explanations, are lacking in design education and research, especially in relation to contemporary crafts/textiles.	F3.5
G5	There are divergent perspectives on the relationship between manual and machine-based methods and their use in product manufacturing. These two methods usually entail different groups of skilled workers (i.e. artisans and product designers) and tools and equipment (e.g. hand tools, mechanical equipment and large machines). In general, artisans and designers do not merge comfortably for a variety of reasons, but especially in their skills and attitudes to producing objects/products, such as in relation to personal meaning and trade. Discussions of the two methods focus, for example, on whether each should continue independently or co-exist in the production process.	F3.4
<b>Gaps in craft in the context of northern Thailand</b>		
G6	<p>Craft enterprises, especially those whose production is based on traditional process, face a lack of knowledge and information about:</p> <ul style="list-style-type: none"> <li>• Potential directions for product design and development;</li> <li>• Essential markets and customers' preferences;</li> <li>• Distribution channels.</li> </ul>	F4.4
G7	<p>Divergent attitudes towards the purposes of making handicrafts are found, which to some extent prevent handicraft producers from having a long-term viable future.</p> <ul style="list-style-type: none"> <li>• <i>Groups that represent Conservative Attitudes</i> see handicraft production as a "traditional" culture with long-term ties to particular localities and part of the cultural heritage of Thailand. Craftspeople are expected to follow traditional ways of making handicrafts.</li> <li>• <i>Groups that represent Commercial Attitudes</i> see handicraft production as an activity which could offer economic viability via trade. This often involves modifying traditions to meet market demand, e.g. through changes in the traditional forms of handicrafts or production techniques.</li> </ul>	F4.5
G8	There is little systematic research on more recent developments in handicrafts and particularly on handicrafts for commercialization.	F4.6
<b>Gaps in craft in both international and local contexts</b>		
G9	"Young" skilled labour is lacking in the traditional production of handicrafts, while the current skilled workforce is aging and declining in number.	F3.6; F4.4
G10	Craftspeople producing traditional crafts have limited knowledge and understanding of changing demand from the markets, especially the urban market.	F3.7; F4.4

**Table 5.3 Key findings about potential areas of *design for sustainability***

Subject code	Description	Finding reference
<b>Potential areas for development in an international context</b>		
P1	Design should engage with small-scale and local production of handicrafts, especially that which is compatible with sustainability and also work on the basis of the particularities of localities (such as geography and climate, natural resources, the groups of skilled artisans and the capabilities of local people relating to technologies). This could help to ensure or revitalize the long-term viability of handicraft production.	F2.6; F3.9
P2	Design could help to create an in-depth understanding of the deep meaning of sustainability through education, research, training and publications.	F2.7
P3	<p>Development and training programmes that can ensure the long-term viability of handicraft production are needed. Design could get involved in these programmes and collaborate with various groups of stakeholders (especially experienced artisans, young craft practitioners and customers) for a long-term relationship and development in many areas including:</p> <ul style="list-style-type: none"> <li>• Knowledge transfer and knowledge exchange in traditional production of handicrafts;</li> <li>• Product design and development and product diversification for potential markets;</li> <li>• Packaging and information design for customers.</li> </ul>	F2.8; F3.10; F3.11; F3.8; F4.7
<b>Potential areas for development in the context of northern Thailand</b>		
P4	<p>Many authoritative voices recommend design collaboration in small-scale production, with major areas of development as follows:</p> <ul style="list-style-type: none"> <li>• Materials exploration and development;</li> <li>• Skills development and the retention of skills;</li> <li>• Production development, including processes and technologies;</li> <li>• Product design and development relating to product quality and value, product diversification and distribution;</li> <li>• Branding and marketing;</li> <li>• The identification of potential markets and customer preferences.</li> </ul> <p>Products with high market potential include:</p> <ul style="list-style-type: none"> <li>• Furniture, wickerwork;</li> <li>• Home decoration, carpets;</li> <li>• Gifts, toys, celebration items;</li> <li>• Garments, textiles, yarn products;</li> <li>• Jewellery.</li> </ul>	F3.3(b); F4.3; F4.7; F4.8

## 5.2 CONCLUSION

---

Sustainability is a global agenda of the twenty-first century (Agenda 21) for change in human activities involving a move towards more responsible ways of living (World Commission on Environment and Development, 1987). It comprises with various interdependent elements, with recent emphasis on personal meaning, social responsibility, environmental care and economic viability (Walker, 2011, p.190).

Industrial design and the traditional practices of local craftspeople are identified as important mechanisms for implementing sustainability, especially in the manufacturing of goods for commerce (Table 5.1, Subject Codes R2, R3). Sustainability, design and craft work together in the way they influence the way we live in society, especially in human interaction with objects, whether for their production, commercialization or utilization (Table 5.1, Subject Codes R1, R2, R3).

This research identifies three main strategies for implementing sustainability through craft and design activities, including:

- Redirecting the role of *design for sustainability* in relation to handicrafts;
- Collecting case studies of handicrafts that demonstrate the potential of *design for sustainability* to develop an in-depth understanding among various stakeholders;
- Identifying potential areas of *design for sustainability* that can ensure the long-term viability of handicraft production.

### 5.2.1 Redirecting the role of *design for sustainability* in relation to handicrafts

The role of industrial design is associated with the mass production of goods and trade, which is usually led by increased market demand, to make a profit. Industrial design is discussed as having both negative and positive contributions to the implementation of sustainability and the long-term viability of handicraft production.

**Industrial design in relation to *sustainability***, on the one hand, can create a number of unsustainable activities, e.g. the overuse of limited natural resources, overconsumption and consumerism, increased waste in landfill, the devaluing of essential humanity, unemployment in some areas and urban migration (Table 5.1, Subject Code R6(a)). On the other hand, it can

make positive changes for society, especially in the manufacture and commercialization of goods, if all the elements of sustainability are taken into consideration (Table 5.1, Subject Code R4), including personal meaning, social responsibility, environmental care and economic viability (Walker, 2011, p.190).

**Industrial design in relation to handicraft production** is commented on as a barrier to the continued production of handicrafts. Handicraft production at a local level is compatible with sustainability in many respects, e.g. socio-economic development, essential humanity and human development, cultural heritage as a component of national identity, the conservation and management of local resources and the technologies appropriate to localities (Table 5.1, Subject Code R2). Handicraft production is a mechanism that is necessary for sustainability (Table 5.1, Subject Code R2). However, handicraft production is in sharp decline and the value of handicrafts is undermined, largely as a result of design in industrial manufacture for trade in mass-produced goods (Table 5.1, Subject Code R6(b)). In Thailand, this has led to a loss of skills, traditional knowledge and human values. (Table 5.1, Subject Code R6(b)). In contrast, it is also claimed that design can make a positive contribution to invigorating handicraft production, for example in the areas of production development, product design and development and design for marketing and sales. Likewise, handicraft producers need directions and strategies for development that can ensure their long-term viability (Table 5.1, Subject Code R6(b)).

**Considering craft, design and sustainability together**, handicraft production at the local level aligns with sustainability in many respects; yet craft and sustainability can also be strengthened or weakened by design. It is crucial to redirect the role of design to ensure the long-term viability of handicraft production in a way that is compatible with sustainability, and especially with all the elements in Walker's Quadruple Bottom Line of Sustainability including personal meaning, social responsibility, environmental care and economic viability (Walker, 2011, p.190), namely *design for sustainability*. The production and commercialization of goods is included in the question of where craft and design activities can successfully collaborate with respect to all the elements of sustainability. Such collaboration can bring about radical and positive change, not just for producers and traders, but for society as a whole, including individual users of the commodities.



### **5.2.2 Collecting case studies of handicrafts that demonstrate the potential of *design for sustainability* to develop an in-depth understanding among various stakeholders**

Literature that provides case studies which demonstrate “the practices of people in the fields” especially in handicrafts and design in relation to sustainability, are lacking in design research and education and also in the manufacturing and commercial sectors (Table 5.2, Subject Codes G2, G4). The majority of craft literature is written for promotional and critical discourse purposes, and only a small proportion offers a historical perspective (Table 5.2, Subject Code G3). Moreover, craft literature that presents craft as an idea that can be used for theory-building is lacking (Table 5.2, Subject Code G3). Also, there is very little which has been written on the basis of more recent research about handicrafts in Thailand specifically dealing with their development in relation to commercialization (Table 5.2, Subject Code G8).

*Clearly*, there is a need for field research to collect case studies which demonstrate craft and design in relation to sustainability. This could nurture an in-depth understanding of sustainability and identify the potential of *craft and design for sustainability* among various groups of stakeholders, especially in the manufacturing and commercial sectors (Table 5.2, Subject Code G1). The field research proposed is specific to handicrafts in northern Thailand because this region is the area that has strongest potential for handmade production, with a high density of small- and medium-sized enterprises – and where handicraft production is reported to contribute to many aspects that align with sustainability (Section 4.4). The first research question to be addressed is therefore: *What are the relationships between the handicraft production of northern Thailand and sustainability?*

### **5.2.3 Identifying potential areas of *design for sustainability* that can ensure the long-term viability of handicraft production**

**Ten product categories** are identified from the literature review as having market feasibility. These are carpets, celebration items (e.g. for wedding ceremonies, birthdays, local festivals), furniture, garments and textiles, gifts, home decoration, jewellery, toys, wickerwork and yarn products (Table 5.3, Subject Code P4). However, this list is felt to contain too many product categories for which there is very little information in relation to *design for sustainability*. There

is a need for a deeper investigation into the field of handicrafts in the region to identify handicrafts that have potential in relation to *design for sustainability*. The second research question is therefore: *Which handicrafts of northern Thailand have potential in relation to design for sustainability? And what are the selection criteria for these handicrafts?*

**Areas for the development** of handicraft production in relation to *design for sustainability* are also identified (Table 5.1, Subject Code R5).

- **Production development** is addressed with specific reference to small-scale production and localization. This involves, e.g. process development, the use of appropriate technologies, material exploration and development, skills development and the retention of skills (i.e. skills training for the young workforce, which is lacking in handicraft production) (Table 5.1, Subject Code R5; Table 5.2, Subject Codes G5, G9; Table 5.3, Subject Codes P1, P4).
- **Product design and development** is addressed in terms of, for example, improvements in product quality for increased value and product diversification (Table 5.1, Subject Code R5; Table 5.2, Subject Codes G6, G10; Table 5.3, Subject Code P4).
- **Design for marketing and sales** involves, for example, the identification of potential market and customer preference, packaging, branding and product distribution (Table 5.1, Subject Code R5; Table 5.2, Subject Codes G6, G10; Table 5.3, Subject Code P4).
- **Knowledge transfer and knowledge development** are needed among handicraft producers. Knowledge transfer in traditional production is addressed, especially from experienced artisans to younger practitioners (Table 5.3, Subject Code P3). Handicraft producers also need to improve their knowledge in other areas, including: marketing, production technology, product design and development, supply chain and product distribution (Table 5.2, Subject Codes G6, G10), and sustainability (Table 5.2, Subject Codes G1, G2).

These areas are yet to be compared with the information collected from the field research. The third research question is therefore: *What are potential areas of design for sustainability among the handicraft enterprises of northern Thailand?*

### **5.3 CHAPTER SUMMARY: RESEARCH AIMS AND RESEARCH QUESTIONS GUIDING FIELD RESEARCH**

---

This research proposes field research into the handicrafts of northern Thailand for data collection, and particularly to identify case studies, which are compatible with *design for sustainability*.

**The research aims are to:**

- Develop an *in-depth understanding* of the *relationship* between sustainability, design and craft among the various stakeholders engaging in the handicrafts sector as producers, supporters (e.g. government agents, educational institutions, the private sector, associations, NGOs), and buyers;
- Provide *examples* of handicrafts along with *criteria* by which they are compatible with *design for sustainability* (according to Walker's Quadruple Bottom Line of Sustainability, comprising: personal meaning, social responsibility, environmental care and economic viability (Walker, 2011, p.190));
- Identify *potential areas* in which design can contribute to the long-term viability of the handicrafts sector, and simultaneously reinforce the implementation of sustainability, i.e. Walker's Quadruple Bottom Line of Sustainability.

**Three research questions** are therefore developed from the conclusions of the literature review, as guidelines for the field research:

1. What are the relationships between the handicraft production of northern Thailand and sustainability?
2. Which handicrafts of northern Thailand have potential in relation to *design for sustainability*? And what are the selection criteria for these handicrafts?

3. What are potential areas of *design for sustainability* among the handicraft enterprises of northern Thailand?

**Additionally, a research question** addressing how to conduct the field research is raised:

4. How can research into *design for sustainability* be applied effectively to a particular area of handicraft enterprises in northern Thailand?

Chapter 6 will provide a rationale for the research methodology, including both the desk and also the field research.

# Chapter Six

## Research Methodology

### 6.0 INTRODUCTION

---

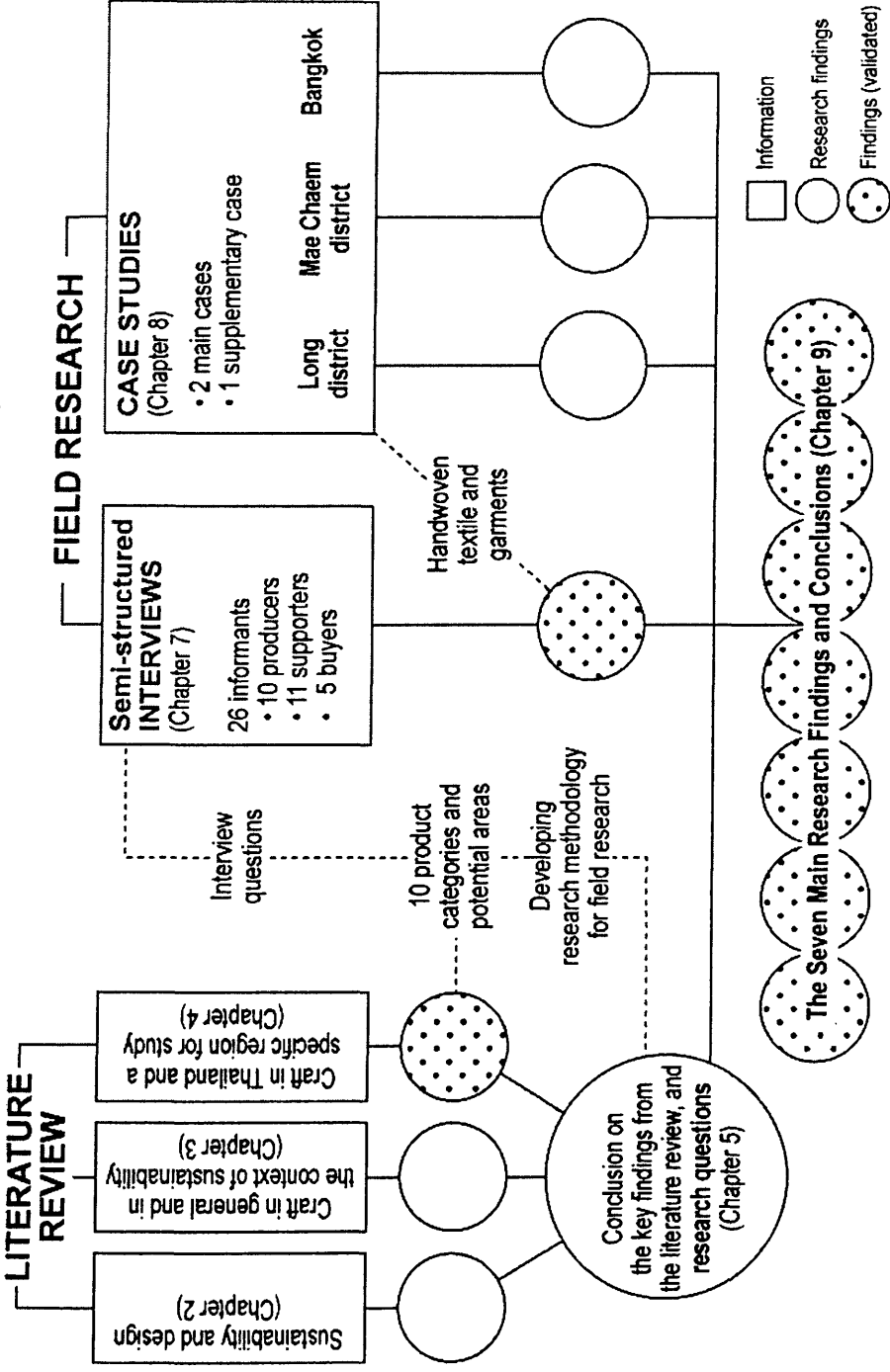
This chapter explains the research methodology employed for data collection and analysis. It comprises: details of a literature review (Section 6.1), semi-structured interviews (Section 6.2) and case studies (Section 6.3); an analysis of all the key findings from the three major data sources (Section 6.4) and; a summary of the chapter (Section 6.5).

**The research aims** are to:

- Develop an *in-depth understanding* of the *relationship* between sustainability, design and craft among the various stakeholders engaging in the handicrafts sector as producers, supporters (e.g. government agents, educational institutions, the private sector, associations, NGOs), and buyers;
- Provide *examples* of handicrafts along with *criteria* by which they are compatible with *design for sustainability* (according to Walker's Quadruple Bottom Line of Sustainability, comprising: personal meaning, social responsibility, environmental care and economic viability (Walker, 2011, p.190));
- Identify *potential areas* in which design can contribute to the long-term viability of the handicrafts sector, and simultaneously reinforce the implementation of sustainability, i.e. Walker's Quadruple Bottom Line of Sustainability.

**The main research activities** included data collection (2012), data analysis (2012–2014), the organization of the research findings (2012–2015), and the validation of the research findings (2012–2015). An outline of the research methodology is given below.

Figure 6.1 Outline of the research methodology



**Data collection** comprised both desk research and field research. *Desk research (also called secondary research)* involved the researcher in collecting information from a literature review. *Field research (also called primary research)* involved the researcher in collecting information in the field, using semi-structured interviews and case studies. Prior to the field research, a proposal for ethical approval was submitted to the Lancaster University Ethics Committee and the researcher received a grant to conduct field research, which involved human participants in the handicrafts sector of northern Thailand (Appendix B).

**A mixed-methods approach** (considering both qualitative<sup>1</sup> and quantitative<sup>2</sup> data) was employed to make enquiries for data collection and analysis (Creswell et al., 2003 cited in Bulsara, 2011; Wisdom, Hoffman and Mihas, 2014). However, much of the data collected and presented here fall into the qualitative category because it helps develop an in-depth understanding of the relationship between sustainability, design and craft. Qualitative data have merit when dealing with “a concept” [craft and *design for sustainability*] that “needs to be understood because little research has been done on it” (Creswell, 2009 cited in Evans, 2010, p.90). However, for research issues which need deeper scrutiny, the mixing of data types can provide “a better understanding of the problem than if either dataset had been used alone ... One type of data provides a supportive role for the other dataset” (Creswell and Clark, 2007 cited in Evans, 2010, p.91).

**A grounded-theory approach**<sup>3</sup> was employed to collect information from the field as well as to analysis the information collected. The researcher collected the information without any existing theoretical framework, although it was guided by (i) the main research questions that derived from the findings from the literature review about craft and design in relation to sustainability, (ii) the questions for semi-structured interviews, and (iii) lines of enquiries for collecting information from the case studies. The interview questions and lines of enquiries

---

<sup>1</sup> **Qualitative data** are information in non-numerical form.

<sup>2</sup> **Quantitative data** are information expressed in numerical form.

<sup>3</sup> **Grounded-theory approach** to research is developed by Barney Glaser and Anselm Strauss (1967) for using in qualitative research that focuses on “developing theoretical ideas” that emerge slowly from the data themselves (Castree, Kitchin and Rogers, 2013; Scott, 2014), through an iterative process of the observation, collection, analysis and systematic reflection of the data in particular areas (Castree, Kitchin and Rogers, 2013). The research does not “begin with a hypothesis, model, or theory to be tested” (Castree, Kitchin and Rogers, 2013). Likewise, this does not necessarily mean that researchers entering the field “without theoretically informed research questions” (Scott, 2014).

were linked to the main research questions. Data analysis involved key strategies, including (i) *coding* – a process “for both categorising qualitative data and for describing the implications and details of these categories” (Trochim, 2006), (ii) [*visualizations of information*], e.g. diagram – to pull all of the coded information together and enable [researchers and reviewers] to make sense of the information and to address emerging ideas (Trochim, 2006) and (iii) *memoing* – “a process for recording the thoughts and ideas of the researcher as they evolve throughout the study” (Trochim, 2006).

**The research findings** are presented according to the main data sources:

- Findings from the literature review (Chapters 2–5);
- Findings from the semi-structured interviews (Chapter 7);
- Findings from the case studies (Chapter 8).

Key findings from these chapters were identified according to the four main research questions. This yielded:

- The seven main research findings and conclusions (Chapter 9).

**Validation of the findings** was undertaken over the course of the research to check on “the quality [accuracy] of the data and the results” (Creswell and Clark, 2007 cited in Evans, 2010, p.124) and to get feedback from informants (Robson, 2002 based on Miles and Hubberman, 1994 cited in Evans, 2010, p.124).

Some information was validated with informants *during data collection in the field*, using techniques such as, paraphrasing parts of the information, making enquiries to relevant informants to review the interview transcripts or to have collective interviews, providing visualizations of information for discussion, observations on relevant people, places, activities and events. These helped to clarify some descriptions and research issues as well as to ensure the clarity and accuracy of information. *After data collection*, aspects of the analysis of the findings were also validated with peer reviewers (for more details, see Section 1.2).



The following sections discuss data collection, analysis and validation using the literature review, semi-structured interviews and case studies.

## 6.1 THE LITERATURE REVIEW

---

**Data collection** from the literature review was conducted over the course of this research. It covered discussions about sustainability, design and craft from both international and local sources, including conference proceedings, annual reports, books, journal articles, magazines and Web-based information. Findings from the literature review were written up into three chapters:

- Sustainability and design (Chapter 2);
- Craft in general and in the context of sustainability (Chapter 3);
- Crafts in Thailand and a specific region for study (Chapter 4).

**The analysis** presented in each chapter was carried out with respect to (i) the relationship between sustainability, design and craft, (ii) the identification of gaps in sustainability, design and craft and (iii) potential areas of *design for sustainability*. Key findings were identified in each chapter (Chapters 2–4). These findings were then assessed as a whole with respect to the relationships, gaps, and areas for development, resulting in conclusions from the literature review, research aims and the research questions as guidelines for field research (Chapter 5).

**Aspects of the research findings were validated** through research papers with peer reviewers that were published in conference proceedings and presented at international design conferences in Thailand (2012), and Japan (2013) (for more details, see Section 1.2).

**The initial findings from the literature review led to field research.** These findings included the need:

- To minimize knowledge gaps in craft in relation to *design for sustainability*, this would need case studies of handicrafts that align well with *design for sustainability* and could demonstrate potential areas for knowledge development, including handicrafts in northern Thailand; and

- To identify specific scope and criteria for collecting case studies of handicrafts in this region, which were based on ten product categories that have market feasibility and several potential areas in which design could contribute to sustainability.

The main research questions were developed to guide the field research.

1. What are the relationships between the handicraft production of northern Thailand and sustainability?
2. Which handicrafts of northern Thailand have potential in relation to *design for sustainability*? And what are the selection criteria for these handicrafts?
3. What are potential areas of *design for sustainability* among the handicraft enterprises of northern Thailand?
4. How can research into *design for sustainability* be applied effectively to a particular area of handicraft enterprises in northern Thailand?

Note: Research question 1 was initially formulated as: “*What are the key principles of craft in the context of northern Thailand and how do they relate to sustainability?*” However, after the field research, this question was reframed because the word “principles” can mean “rules or laws of conduct” (Oxford English Dictionary, 2015), which are not so explicit in the sphere of handicraft production of this region. Rather, “social norm” is more appropriate to describe a pattern of social behaviour of various groups in this region who accept handicraft production as part of their way of living. This norm is to some extent, associated with a belief in Buddhist principles and traditional rites, e.g. traditional weaving. Rephrasing the research question involved issues of “the dimension of linguistic difference” and was “a necessary step toward clarity of [research] purpose” (Poggenpohl, ca.2015).

## **6.2 DETAILS OF THE SEMI-STRUCTURED INTERVIEWS**

---

As mentioned above, the initial findings from the literature review were insufficient to identify a specific handicraft in this region for in-depth research in relation to *design for sustainability*. Therefore, semi-structured interviews were employed to collect a “series of general ideas or

abstract statements” from sufficient numbers<sup>4</sup> of key informants which could help make “predictions for future changes” (Hall and Hall, 1996, pp.32–33 cited in Chudasri, Walker and Evans, 2013, p.587).

### 6.2.1 Data collection and validation

Data collection from semi-structured interviews was carried out according to a schedule over 15 weeks, dependent on the availability of informants. This involved a search for informants, informant recruitment, interviews and then validation of information. While awaiting ethical approval for the research, a search for informants was undertaken. As soon as the ethical approval was granted, the activities below started in parallel and went on for 11–14 weeks. Aspects of the information collected were validated with informants *during* the interviews by paraphrasing parts of the information as well as *after* the interviews by making enquiries to relevant informants to review the interview transcripts. These helped to clarify some descriptions, and ensure the clarity and accuracy of information.

**The search for informants** included creating a list of potential informants to recruit for the research, informing people about the research activity to encourage them to participate or make suggestions about key informants. Sources of information about key informants included: work acquaintances, colleagues and friends<sup>5</sup>, literature (e.g. books, reports, magazines and websites), social media (e.g. Facebook)<sup>6</sup> and the researcher (via the retrieval of information about handicraft producers and supporters known in the past).

**Informant recruitment** was carried out by email and telephone with enquiries about their willingness to participate in research, requests for permission to collect data and arrangements for interviews. During the interviews, some informants advised the researcher of others who might be appropriate to participate. Of the groups of producers, supporters and buyers involved in the handicrafts sector, the buyers group was the most difficult to recruit in this research. However, the minimum number of informants was reached.

---

<sup>4</sup> **A sufficient number** for sample size is suggested as being a minimum of “around thirty”, and if applicable, having a minimum of five people in each sub-group (Dixon et al., 1987 cited in Hall and Hall, 1996, pp.116–117). For student projects, the sample size for in-depth interviews is between 8 and 20 people (Hall and Hall, 1996, p.82).

<sup>5</sup> **Colleagues and friends** are involved in areas including design or craft businesses, industrial management and consultancy.

<sup>6</sup> **Facebook** is a domain in which some people create particular pages about design and craft activities. It is useful when used as a tool for following up on someone’s activities or connecting to people.

The **semi-structured interviews** were usually<sup>7</sup> conducted via telephone or face-to-face meetings. A list of interview questions (Appendix B) was used to manage the interviews, which lasted between 30 and 60 minutes. Interview discussions were recorded on an audio recorder and simultaneously key messages were jotted down in field notes. Field notes helped to keep the interviews on track<sup>8</sup> and ensure that all the research questions were answered.

The **informants** comprised 10 producers, 11 supporters and 5 buyers. More than half (n=14) of the informants claimed to have one or two *secondary* roles besides their *primary* role. When *multiple* roles are taken into consideration, the group comprised 13 producers, 19 supporters and 9 buyers. Such numbers ensured that *sufficient*<sup>9</sup> data was collected “to yield interesting results” (Gilbert, 1993 cited in Hall and Hall, 1996, p.18). Table 6.2 categorises the informants according to major and multiple roles. The key attributes of the groups of informants are briefly explained in Table 6.3.

---

<sup>7</sup> **Usually:** The exception was an informant living in a European country who provided answers and explanations via email rather than telephone.

<sup>8</sup> **Keeping interviews on track:** this was necessary on occasion when informants strayed from one question to another in longer answers, or when they were interrupted briefly by a phone call or something else and so on.

<sup>9</sup> **A sufficient number** for sample size is suggested as being a minimum of “around thirty”, and if applicable, with a minimum of five people in each sub-group (Dixon et al., 1987 cited in Hall and Hall, 1996, pp.116–117). For student projects, the sample size for in-depth interviews is between 8 and 20 people (Hall and Hall, 1996, p.82).

Table 6.1 Informants identified by major role and experience and multiple roles

Informants by Major Role & Experience					Informants & Multiple Roles				
Group Identification	Experience (Years)			Total	Major Role	Other Roles			Total
	10-20	21-30	31-40			P	S	B	
Producers (P)	5	5	0	10	Producers (P)	10	4	1	
Supporters (S)	6	2	3	11	Supporters (S)	2	11	3	
Buyers/Traders (B)	3	1	1	5	Buyers/Traders (B)	1	4	5	
<b>Total</b>	<b>14</b>	<b>8</b>	<b>4</b>	<b>26</b>	<b>Total</b>	<b>13</b>	<b>19</b>	<b>9</b>	<b>26</b>

Table 6.2 Three informant groups and key attributes  
(For details of each informant, see Appendix C)

Group	Attribute
Producers (n=10)	<p>Informants in the Producers Group primarily engage in handicraft production for <i>small-sized</i><sup>10</sup> enterprises. Some of them are makers and business-owners. Some are business-owners/partners, design-directors/designers of companies. They are involved in: textiles (n=2), blacksmithing (n=1), silver jewellery (n=2), mulberry paper making (n=1), ceramics (n=1), woodcarving (n=1), wickerwork for furniture and interior decoration (n=2) and have experience in the field of between 10 and 28 years.</p> <p>Among ten producers, eight informants (Producers 1-8) are of <i>northern</i>-Thai descent and have carried out handicraft production in this region. Two informants (Producers 9, 10) are based in the <i>central</i> region and produce wickerwork for furniture and interior decoration. Informants 9 and 10 were recruited for interview at a time when it would have been difficult and time-consuming to find wickerwork- and furniture-makers within the northern region who were deemed to have sufficient knowledge of the handicrafts sector. Both accepted and commented that they could provide information specific to wickerwork, plus their experience with handicraft enterprises in this region.</p>
Supporters (n=11)	<p>Informants in the Supporters Group engage directly or indirectly with the handicrafts sector. This includes design educators/consultants, business advisors/owners/partners, government agents, presidents of associations, an economist and the secretary of an international craft organization.</p> <p>They were deemed to have sufficient knowledge about the handicrafts sector of Thailand, including the northern region. Their experience in the field varies from 10 to 35 years. They have responsibility at different levels, i.e. local (northern region), national (Thailand), regional (Asia) and international.</p> <p>Eight informants are based in Bangkok, while three informants (Supporters 11, 15, 17) work in the northern region, in Chiang Mai and Lampang provinces.</p>
Buyers (n=5)	<p>Informants in the Buyers Group buy handicrafts for business and investment. They identify themselves as a technician in a purchasing department, a managing director, importers, traders and distributors, with experience in business associated with handicrafts of between 10 and 35 years.</p> <p>Buyer 22 is a Thai working for a large-sized<sup>11</sup> company (a global brand) owned by non-Thais, with its branches worldwide. Buyer 23 is a Thai living in Europe who owns a small company registered in a European country. Buyer 24 is a Thai who is a partner in a private company. Buyer 25 is an expatriate who runs a handicraft business and projects with production based in Thailand and other countries in Asia. Buyer 26 is a Thai working for a company jointly owned by the government and the private sector.</p>

<sup>10</sup> **Small-sized enterprises**, in the context of Thailand, consist of the number of employees up to: 50 people (in manufacture); 25 people (in wholesale trade); 15 people (in retail trade); and 50 people (in service) (Association of Southeast Asian Nations Secretariat, 2011, p.58).

<sup>11</sup> **Large-sized companies**, in the context of Thailand, consist of more than 200 employees (Association of Southeast Asian Nations Secretariat, 2011, p.58).

### 6.2.2 Data preparation and analysis

This process took 15 weeks, including data preparation (11 weeks) that overlapped with data analysis (7 weeks).

**Data preparation** was routinely done after each interview. Textual data were the result. Data were prepared for analysis in two forms: interview transcripts and summary notes.

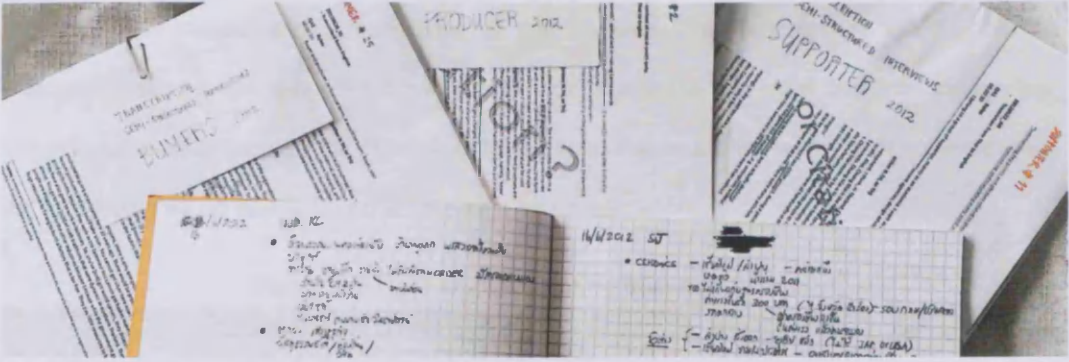
- *Interview transcripts* – 17 of the 26 audio records of the interviews were transcribed and written up in Microsoft Word and then printed out. Some of the interview transcripts were sent to relevant informants for the validation of information.
- *Summary notes* – 9 of the 26 audio records of the interviews were taken as summary notes. This technique was less time consuming than transcribing interviews and could yield relevant results. Key information from the interview recordings was written up according to themes derived from the interview questions. Field notes were useful to: pinpoint the key information addressed by the informants; and reveal the actual sequences of answers, especially when interviews did not go according to the order of interview questions.

**Data analysis** involved the identification of key words and descriptions in the answers from the interviews. This was mainly guided by, but not limited to, the interview questions. It also allowed key messages addressed by the informants to emerge. These key words and descriptions were then sorted into themes and subthemes.

*Simple hand-tools* were utilized, including printouts of interview transcripts and summary notes, papers and colour pens for highlighting key words and descriptions, and post-it notes for quickly sorting large amounts of data into themes and refining ideas by moving- Post-it notes around. Initial research findings emerged as all the bits of data became coherent and clear in relation to the analysis subjects.



Figure 6.2 Data analysis, using simple hand-tools



The interview transcripts and summary notes were printed out, along with field notes.



Keywords and descriptions were extracted from the interview transcripts and summary notes, and categorised under themes/sub-themes.



Major themes were assigned in colours.



Various key words were categorised under major themes.

In parallel, *Microsoft Excel* was employed at times to (i) record all the bits of data analysed, including key words and descriptions in the answers, the (encrypted) identity of the informants, (ii) revise the themes/subthemes and rearrange the data bits into categories, (iii) perform calculations on the number of informants, the frequency with which subjects were explored, and so on and (iv) prepare the data for presentation.

Figure 6.3 Data analysis, using Microsoft Excel

Theme	Sub Theme	Code No.	Code	Informant (per code)	Total	Informant (per Sub-theme)	Total	Informant (per Theme)	Total
<b>Marketing &amp; Sales</b>									
	Price Structure	68	Price	S21	1	S21	1		
		72	R & D	P9, S12	2				
	Product	70	Product & development	P3, P7, S18, B23, B24	5	P3, P7, P9, S12, S16, S18, S21, B23, B24	9		
		69	Product & customer	S21	1				
		47	Innovation	S16	1				
	Design	18	Design	P4, P6, S11, S12, S18, S20	6			P3, P4, P5, P6, P7, P8, P10, S11, S12, S13, S14, S16, S17, S18, S20, S21, B23, B24, B25, B26	20
		21	Design & strategies	S17	1				
		20	Design & product	P3, P5, P7, P10, B23, B25	6				
		19	Design & customer	S20	1				
	Target Customer	14	Consumption	P6, S11	2				
		57	Market	S12, S13, S14, S18, S20, B23	6	P3, P5, P6, P10, S11, S12, S13, S14, S18, S20, S21, B23, B25, B26	14		
		58	Market & customer	P3, P5, P10, S12, S14, S18, S20, S21, B23, B25, B26	11				
		59	Market & sales	S20	1				
		38	Future & market	B26	1				
<b>Uncertainty</b>									
		83	Uncertainty	S17, B24	2				
		87	Unexpected	S11, B24, B26	3	S11, B24, B26	3	S11, B24, B26	3
<b>Education / Training</b>									
		30	Education & collaboration & society	S16	1	S12, S16	2	S12, S16	2
		89	Young generation	S12	1				

### 6.2.3 Research findings and validation

An initial set of findings was identified specific to the handicrafts of northern Thailand, including the main markets and market components, levels of enterprise, core elements necessary for the viability of handicraft production, factors involved in the viability of handicraft enterprises, three product categories that have strong potential for long-term viability, the product category that has the *most* potential in relation to *design for sustainability*, the stakeholders involved, and three directions for development.

These research findings were then revised and validated through:

- A *research paper* with peer reviewers that was presented at international design conferences in Japan (2013) and published in the conference proceedings; and
- *Visualizations of information and group discussions* with practitioners with experience in the fields of craft, design and manufacturing in Thailand and India (2013) for feedback and recommendations. This resulted in revision of the information in Chapter 7 in terms of the significance, accuracy and coherence of the findings.

(For more details, see Sections 1.2 and 7.4.1).



#### 6.2.4 Key findings leading to case studies

Three handicrafts in this region that have strong potential for long-term viability were identified, including (i) furniture made of wood and fibrous plants, (ii) handwoven textiles and garments and (iii) silver jewellery and costume jewellery. These were selected on the basis of four critical factors affecting their long-term viability, including production capacity, product viability, market feasibility and legislation. Of these products, *handwoven textiles and garments* were identified as having *the most potential* in relation to *design for sustainability* because of the ready availability of raw materials and well-established markets. This led to the identification of case studies in weaving communities and textile enterprises in this region.

### 6.3 DETAILS OF THE CASE STUDIES

---

A case study is an implementation of a research method that involves an empirical inquiry and in-depth investigation into a contemporary phenomenon [as a subject of study] in real-life contexts, “such as individual life cycles, small group behaviour, organizational and managerial processes, neighbourhood change, school performance, international relations, and the maturation of industries” (Yin, 2009, pp.4, 18). It also involves “analyses of persons, events, decisions, periods, projects, policies, institutions, or other systems that are studied holistically by one or more” research strategies within the case being studied (Thomas, 2011).

The applications of case studies in research (whether as a sole method or as part of a larger mixed-methods study) are prominent especially in the social sciences, ranging from several disciplines for example psychology, anthropology, sociology, political science, clinical science, administrative science, to professions, such as social work, education, business and marketing (Yin, 2009, p.5). Case studies are a rich source of various evidence, including “documents, artifacts, interviews, and observations” (Yin, 2009, p.11), that can be utilized to:

- “*Explain* the presumed causal links in real-life interventions that are too complex for the survey or experimental strategies” (Yin, 2009, p.19);
- “*Describe* an intervention and the real-life context in which it occurred (Yin, 2009, p.20);

- “*Illustrate* certain topics within an evaluation, again in a descriptive mode” (Yin, 2009, p.20);
- “*Enlighten* those situations in which the intervention being evaluated has no clear, single set of outcomes” (Yin, 2009, p.20).

*Ethnographic* case studies were employed in this research to study “the cultural phenomenon” that was the weaving communities of northern Thailand in depth in various aspects, especially their local wisdom, “knowledge ..., behaviours ..., attitudes, beliefs and practices (Huerta, 2010 cited in Chudasri, Walker and Evans, 2013, p.587) of textile production in relation to *design for sustainability*. These can help “to develop new design thinking, design knowledge and cross-cultural work practices” (Hall and Hall, 1996, p.42; Clark, 2000; Valsecchi and Ciuccarelli, 2009, p.3517; Visocky O’Grady and Visocky O’Grady, 2009, pp.26–29 cited in Chudasri, Walker and Evans, 2013, p.587).

### 6.3.1 Overview of the three case studies in weaving and handwoven textiles

This research gathered three case studies, including:

- *Two in-depth case studies* in the weaving communities of the Tai Yuan ethnic group producing *chok* textiles and clothing in Long district (Phrae province) and Mae Chaem district (Chiang Mai province) in northern Thailand;
- *A supplementary case study* with a brief investigation into a company running weaving courses and training in Bangkok.

**The weaving communities** of Long and Mae Chaem districts are compatible in many ways. They are of the same ethnicity, being identified with the Tai Yuan. They see the traditional weaving of textiles and clothing as part of their cultural heritage, handed down over generations, especially among the women. The weavers have developed textiles with different characteristics, mainly through a discontinuous supplementary weft technique called *chok* and patterning to “distinguish themselves from others, including Tai Yuan from other regions” (McIntosh, 2012, p.3). The weavers also make tubular skirts that are decorated with elaborate patterns at the bottom (*sin tin chok*) (McIntosh, 2012, p.6), for occasional use,

especially for religious ceremonies in temples. Cotton is the usual material for weaving (McIntosh, 2012, p.6).

Over time, *chok* weaving has developed to meet local preferences and needs, resulting in differing techniques, processes, and patterns and in the monetary value of the textiles. Textiles from the Long and Mae Chaem districts are renowned among other textile communities in Thailand for having revitalized or preserved weaving culture and ethnic textiles and their identity. What is more, both these communities are able to produce a wide range of handwoven textiles to supply commercial markets.

**Figure 6.4 Weaving communities of the Tai Yuan**



**Long district**



**Mae Chaem district**

A group leader from each of the weaving communities of Long and Mae Chaem districts and a company running weaving courses and training in Bangkok all emphasised similarly **the value of handloom weaving and textiles** as part of the cultural heritage and the identity of Thailand. Nevertheless, weaving communities are declining in number because the aging workforce is not being replaced by members of the younger generation. These group leaders are emphatic about this situation, and clearly identify *weaving courses and training* as something which is crucial for the revitalization of weaving communities and Thai textiles as a whole, which in turn, could strengthen the cultural heritage and identity of Thailand.

**A company in Bangkok offers weaving courses and training** that are different from those in the weaving communities of Long and Mae Chaem districts. Differences include the use of: silk yarn in thicker sizes; modified handlooms developed by the company; standard tools that are similar to those used in textile factories; simplified weaving techniques and a segregation of skill levels, which allows small works of art to be made in a short space of time. These courses are offered to people who are interested in handloom weaving as a hobby. The company also supports people who come up with their own designs for patterns and products.

What this company does, however, is a simplified form of weaving adapted from that practiced in traditional weaving communities, including the *chok* technique. The handloom used by the company was modified to minimise problems in traditional handlooms such as their large size and a design which makes them difficult to dismantle for moving. The company may develop advanced weaving courses to include traditional patterns in the near future.

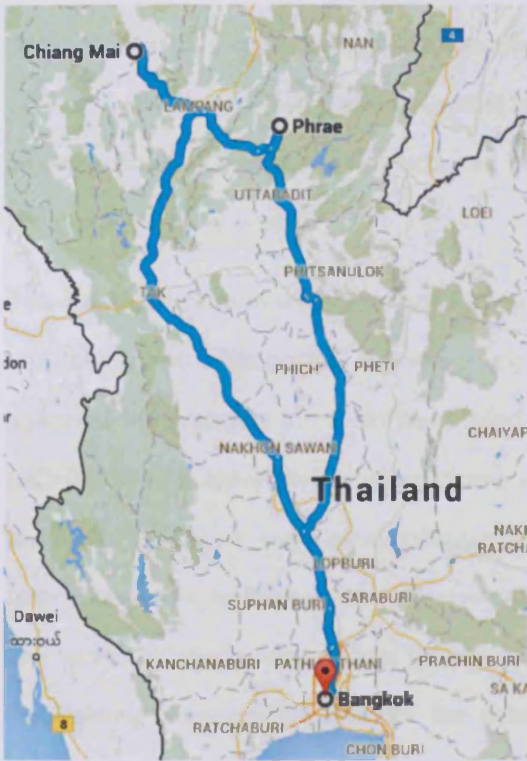
Figure 6.5 The company running weaving courses and training in Bangkok



Field research was conducted in Chiang Mai and Phrae provinces and Bangkok. Maps showing the journeys undertaken for these case studies are given in Figure 6.6.



**Figure 6.6 Journeys undertaken for case studies (Chiang Mai and Phrae provinces and Bangkok)**



Bangkok is the capital city of Thailand and located in the central region. The distance and travel duration (by car) from Bangkok, to:

- The centre of Chiang Mai is around 700 kilometres and takes between 8 and 9 hours;
- The centre of Phrae is around 580 kilometres and takes about 7 hours.

The centre of Chiang Mai is between Mea Chaem and Long districts, and was used as a research hub. The distance and travel duration (by car) from the hub, to:

- Mae Chaem district is 151 kilometres, and takes about 3 hours;
- Long district is 160 kilometres and takes about 2 hours.

Note: 1 kilometre is equivalent to 0.6 miles.



The field research for the case studies lasted for 17 weeks and involved various activities, including: the identification of case studies and selection criteria, and data collection and validation.

### 6.3.2 Identification of the case studies and selection criteria

This involved a search for textile producers, contacting them for permission to conduct research, identifying which producers would be most suitable for case studies and developing selection criteria. These activities occurred intermittently over a period of seven weeks, and complemented one another.

The **selection criteria** were developed through an iterative process in which the researcher and informants collaborated. Informants included an advisor and officers of government agencies, the president of the Northern Handicrafts Manufacturers and Exporters Association (NOHMEX) and university lecturers. Some were informants who participated in the semi-structured interviews, some were colleagues of the researcher at Chiang Mai University, and others were new to the researcher, recommended by acquaintances or found on websites. The selection criteria were revised three times (see Appendix D) to make them applicable to the weaving communities used for the case studies. This process included validation of information with experts in the field of handwoven textiles via several research techniques, for example site visits and observations, making enquiries and discussions, paraphrasing parts of the information, providing visualizations of information about weaving communities and textile products. The weaving communities of Long and Mae Chaem districts were selected because of their similarity and compatibility. The final version of the selection criteria included the following main points:

- *Principal material* – cotton;
- *Weaving technique* – discontinuous supplementary weft (*chok*);
- *Ethnic group* – Tai Yuan;
- *Reputation and public recognition* – at the national level; the leader of the Long district group was declared a national artist in visual art (fine art and the art of handwoven textiles) in 2010; the leader of the Mae Chaem district group is well known nationally as a pioneer in the revitalization of traditional weaving.

Multiple research techniques and tools were utilized for identifying case studies and developing selection criteria.

- **Research techniques** included: *enquiries and discussion* via email, telephone and face-to-face meetings, a *literature review* of paper- and Web-based sources (e.g. books, brochures and websites), a *market survey* at trade fairs and local markets and *site visits and discussions* in Lamphun, Chiang Mai and Phrae provinces.
- **Research tools** included: field notes, conceptual frameworks, a camera and books with photographic information. These helped to capture, recapitulate and visualise factual information collected in the field and to stimulate critical thinking and lines of enquiry for deeper investigation.

### 6.3.3 Data collection and validation

Data collection was conducted mainly in the communities producing *chok* textiles in Long and Mae Chaem districts. It also covered a company running weaving courses and training in Bangkok, local markets and trade fairs in Chiang Mai and Bangkok, and a craft workshop in Chiang Mai. The table below summarises the total number and duration of field visits to these places.

**Table 6.3 Number and duration of field visits for case studies**  
(Duration of visits varies from 0.5 days to 1–5 days.)

Case No.	Description	Location	Number of visit	Total duration (days)
1	The weaving communities of Long district	Production site in Long district	5	15.0
		Outlets in ▪ The centre of Chiang Mai ▪ Bangkok	1	1.0
			2	2.0
2	The weaving communities of Mae Chaem district	Production site in Mae Chaem district	2	9.0
		Outlets in the centre of Chiang Mai	2	2.0
3	A company running weaving courses and training	Production site in Bangkok	1	1.0
	Observations in local markets and trade fairs, a tie-dyed textile workshop	Chiang Mai province	4	4.0
		Bangkok	5	4.5
<b>TOTAL</b>			<b>22</b>	<b>38.5</b>



**Data collection in Long and Mae Chaem districts** occurred intermittently over 10 weeks. A plan for data collection was spontaneously developed on the basis of the availability of informants, local events that involved a number of people and unexpected issues that arose in the field. The weaving communities of each district were visited between two and five times, and each visit took between half a day and five days. Aspects of the data collected were validated with informants in the field for clarity and accuracy of information. (Multiple techniques and tools used for validating the information collected are explained in more details in the paragraphs that come after Table 6.4). The participating groups were from:

- *Long district* – including three sub-districts: Hua Thung (i.e. two villages: Ban Phai Lom and Ban Chetawan), Ban Pin and Huay O;
- *Mae Chaem district* – including two sub-districts: Tha Pha (i.e. four villages: Ban Pa Daet, Ban Thap, Ban Yang Luang and Ban Rai) and Chang Khoeng (i.e. Ban Ko and Ban Tong Fai).

**Data collection from the company** running weaving courses and training in Bangkok was carried out over one day, and this was considered to be a supplementary case study. The identification of this company occurred in a period of one week towards the end of the in-depth case studies in the weaving communities of Long district. A group leader of Long district suggested this company as an example of the development of weaving courses and tools. A brief investigation was therefore undertaken, using interviews with informants and trial participation on weaving courses.

**Data collection from other places** was carried out intermittently over 11 weeks in local markets and trade fairs and in a tie-dyed textile workshop. This allowed the researcher to gain a more comprehensive and holistic understanding of the textile sector, as well as specific knowledge about *chok* weaving and *chok* textiles.

The grouping of the informants in the case studies is summarized below, including their roles and total numbers.

**Table 6.4 Grouping of the informants in the case studies**

Description of informants	Case location and number of informants		
	Long district	Mae Chaem district	Bangkok
<b>Identified by their roles involved in textile production and enterprises</b>			
▪ <b>Group leaders</b> (Most are artisans themselves.)	3	7	
▪ <b>Weavers</b>	5	10	
▪ <b>Shop owners/assistants</b>	3	1	4
▪ <b>Villagers</b> – who work in other businesses	1	1	
▪ <b>Villagers</b> – general	3	2	
▪ <b>Visitors/buyers</b> – for cultural experience		2	
▪ <b>Buyers</b> – who have textile businesses	1	1	
▪ <b>Staff of a government department</b> at the local level	1		
<b>TOTAL</b>	<b>17</b>	<b>24</b>	<b>4</b>
▪ <b>Weaving trainees</b> – a group of schoolteachers (2) and students (18) from another province came for a weaving course and training for one month	[+20]		
<b>Identified in terms of the amount of extensive information given to the researcher</b>			
▪ <b>General informants</b> (met swiftly and unexpectedly in the localities)	13 [+19]	19	3
▪ <b>Key informants</b> (whom the researcher spent some time with during the case studies, i.e. the group leaders, experienced weavers)	4 [+1]	5	1
<b>TOTAL</b>	<b>17 [+20]</b>	<b>24</b>	<b>4</b>

**Multiple techniques** were employed for collecting information and validation of it, depending on the situation, rapport with the informants and the types of information (such as oral discussions, books, pieces of textiles, weaving demonstration).

- *Key informant enquiries, conversations and informal interviews* were used with the group leaders and weavers, villagers, shop owners/assistants, buyers/traders and weaving trainees in the weaving communities of Long and Mae Chaem districts and in the weaving company in Bangkok.
- *Collective interviews and discussions* were employed with specific informants, when a deeper investigation was needed into particular issues (such as different perspectives, potential areas for future development, training techniques and production techniques and processes).

- *Observations* were based on (i) *people* (such as weavers, villagers, weaving trainees, customers in local shops), (ii) *places* (such as houses, temples, handicraft centres, textile museums, a cultural centre, schools and studios for weaving courses and training, local shops and markets, guesthouses and accommodation) and (iii) *events* (i.e. cultural performances, religious ceremonies, exhibitions and trade fairs that demonstrated the use of *chok* textiles and/or weaving demonstrations, weaving and embroidery workshops).

Different roles were adopted by the researcher at times, including (i) *facilitator* (e.g. in discussion of issues concerning feedback, and in activities requiring computer skills or digital tools), (ii) *practitioner* (in reproducing textile patterns with various tools, such as photographs, graph papers and a computer program, or in participating as a student in weaving basic courses) and as (iii) *customer* in purchasing *chok* textiles and enrolling for courses.

**Tools** for collecting information and validation of it included field notes (also called a research diary), cameras, a video recorder, an audio recorder, questionnaires and the visualization of information.

- *Field notes* were practical and usually permitted by many informants for data collection, rather than audio recording. Field notes also helped the researcher to plan the field research on a day-to-day and weekly basis, and to reflect on critical issues that would need a deeper investigation.
- *Audio recording* was, to a large extent, considered inconvenient for the informants. Several informants preferred conversations not to be audio-recorded and to remain anonymous. Many were busy, were frequently interrupted at times, and did not have time for a formal interview using an audio recording. Some appeared suddenly and swiftly so an audio recording could not be set up in that time. Nevertheless, towards the end of the field research, audio recording was useful, when the researcher was inundated with the data collected and came across additional informants considered to be a rich source of information. Two informants allowed interviews with audio recording.

- *Questionnaires* were applied with a group of schoolteachers and students participating in a weaving course. This was to collect information about their insights from the course, feedback and recommendations.
- *Visualization of information* was developed in the form of diagrams, drawings and books with photographs. These were used particularly with the group leaders and experienced weavers to validate aspects of information summarised by the researcher and to articulate their preferences on particular issues (such as materials to help facilitate sales).

#### **6.3.4 Data preparation and analysis**

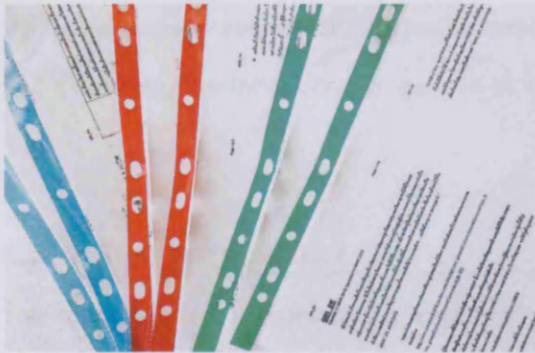
As a result of data collection, three main data types were identified, namely textual data (e.g. field notes, interview transcripts), visual data (e.g. photographs, videos) and artefacts and documents (e.g. textile products, journals, books).

**Data preparation** began with making a list of the informants and the artefacts collected in an Excel file. The informants were sorted into groups (identified by their production bases). Each of them was uniquely identified with a code (using letters and numerals, e.g. L01\_FN+AD to indicate the group and techniques used for recording information). Information was prepared in *standard Thai*. Information jotted in field notes was summarized as summary notes. The audio interviews were transcribed and written up in Microsoft Word. The preparation of textual information lasted for 2.5 months.

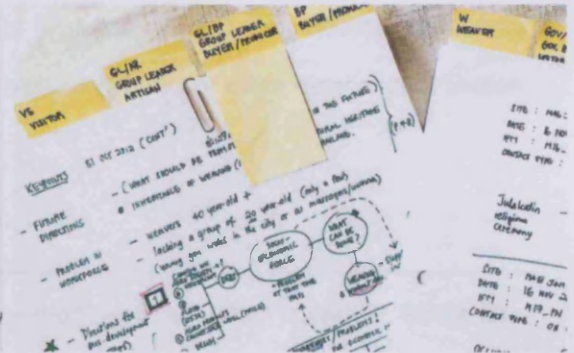
**The initial analysis of the data collected**, including the two main case studies, was conducted over two months. The cases were analysed in one after another. Interview transcripts and summary notes were printed out. Keywords and descriptions in the informants' answers were identified and sorted in an Excel file, resulting in eight to eleven themes and several subthemes. The themes which emerged from the two case studies were similar, including weaving communities and their way of life, production management, weaving techniques and process, weaving courses and training, textile products and business, and the continuity and development of weaving communities, along with other issues (such as external intervention and support).

The second phase of the analysis took between two and three days for each case, using simple tools, including printouts of the thematic information, paper, colour pens, scissors, adhesive tape and post-it notes. The thematic information was initially used for (i) reviewing the relationship between various themes and their keywords and descriptions, (ii) reorganizing themes as a coherent whole and (iii) mapping out research findings and a framework for writing a chapter. Findings from the three case studies are presented separately in the three main sections of Chapter 8. This process took about two and a half months.

Figure 6.7 Data preparation and analysis of the case studies



Interview transcripts and summary notes were printed out.



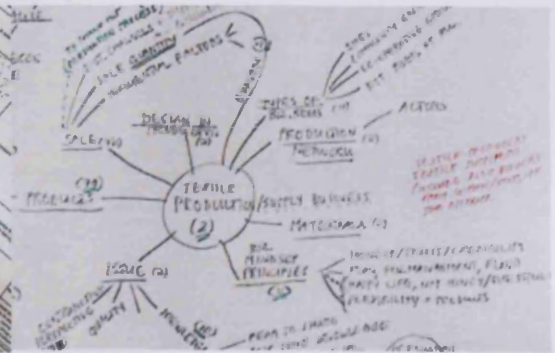
Keywords and descriptions were extracted from the answers.

Theme 2: WEAVING TECHNIQUE & PROCESS		
Subtheme	Main Description	Detailed Description
Technique for creating new patterns	Mix and match patterns (based on traditional ones from collections of vintage textiles)	Mix several traditional motifs (identified by names, seen from vintage textiles as a master teacher) together with different li pattern. Colour combination can be altered upon weaver's or preference. A master weaver communicates her ideas to experienced weavers the names of traditional motifs. They don't need to draw pict have long experience in weaving and knowing the motifs.
	Computerized	Mentioned by other companies. Master weavers mentioned I see it from other people, but they had never used computer I creating/replicating/documenting the patterns in this commu
Techniques for replicating the traditional patterns from vintage textiles	Vintage fabric + graph paper	Vintage fabric --> photoshooting --> photograph --> scanner
	(Vintage fabric) > photograph + scanner	a tool for colour manipulation (select+change); a scaling tool in actual size
	(Vintage fabric) > photograph + weaver	*** in case of vintage fabric is not permitted to take out. *** in case of vintage fabric is not permitted to take out.

Keywords and descriptions were categorised under themes/sub-themes in an Excel file.



The initial set of thematic analysis was printed out to review and rejig some items in data sheets with the most suitable themes/sub-themes.



Main themes and subthemes were mapped out to identify research findings and create a framework for writing up.

## **6.4 AN ANALYSIS OF ALL THE KEY FINDINGS FROM THE THREE MAJOR DATA SOURCES**

---

Research findings were formulated separately for each data source: the literature review (Chapters 2–5), the semi-structured interviews (Chapter 7), and the case studies (Chapter 8). Subsequently the key findings from these chapters were taken together for analysis in relation to the four main research questions. The analytical techniques and tools were similar to those used in the analysis of the case studies. This yielded the seven main research findings and conclusions (Chapter 9). Validation of aspects of the research findings was conducted through a poster presentation and discussions for feedback in a workshop about documenting and preserving the indigenous languages of Thailand (2015) (for more details, see Section 1.2).

## **6.5 CHAPTER SUMMARY**

---

This chapter has presented the research methodology for data collection about the handicrafts of northern Thailand in relation to *design for sustainability*, the data analysis and validation of the information collected as well as aspects of the research findings. The three main research strategies for data collection included literature review, semi-structured interviews and case studies. The following chapters present the findings from the field research, including findings from the semi-structured interviews (Chapter 7) and findings from the case studies (Chapter 8).

# Chapter Seven

## Findings from Semi-structured Interviews

### 7.0 INTRODUCTION

---

This chapter discusses the findings from the first phase of the field research, which used semi-structured interviews to collect primary data. The aim was to gain an understanding of the handicrafts sector of northern Thailand and to identify a particular category of handicraft which aligns well with sustainability for in-depth case studies. Semi-structured interviews were conducted in 2012 with 26 informants in the handicrafts sector, including producers, supporters and buyers.

The research findings are presented in three main sections as follows:

Section 7.1: The current situation of the handicrafts sector of northern Thailand;

Section 7.2: The perspectives of people involved in this handicrafts sector on sustainability;

Section 7.3: The supply chain of the handicrafts of this region, including handicrafts with strong potential, potential markets and directions for development.

These research findings were validated by experienced practitioners in the fields of craft, design and manufacturing in Thailand, India and Japan in 2013. Feedback and recommendations are presented in Section 7.4.

### 7.1 THE CURRENT SITUATION OF THE HANDICRAFTS SECTOR OF NORTHERN THAILAND

---

This section presents the research findings relating to the current situation of the handicrafts sector in northern Thailand, including:

Finding 1: The current state of handicraft production;

Finding 2: Factors involved in the development of handicraft enterprises;

Finding 3: Call for change to ensure the continuance of handicraft production.



### 7.1.1 Finding 1: The current state of handicraft production in northern Thailand

Analysis of the current state of handicraft production in the region is based on information given by 22 informants in semi-structured interviews. Of a total of 26 informants, four did not give an opinion about this due to a lack of information. Of the rest, the producers group gave opinions only on the particular handicrafts in which they are involved, e.g. ceramics, textiles or jewellery, relying on their specific knowledge rather than considering the sector as a whole. An analysis and explanation of the state of handicraft production in the region is summarised below.

**Table 7.1 Analysis of the current state of handicraft production in northern Thailand**

(Source: Semi-structured interviews with 22 informants)

State	Producers										Supporters										Buyers						Number of informants	Score (%)	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26			
Decline	1	1	1	1	1	1	1	1			1	1		1		1	1		1	1		1			1	1	1	19	61.3
Stable	1		1				1								1	1												5	16.1
Expanding															1									1				2	6.5
Developing																					1							1	3.2
No comment								1	1			1						1										4	12.9
																												31	100.0

- The sector as a whole was seen to be in **decline** by 19 informants, based on a contraction in purchasing orders and production. These informants also felt that handicraft production was in decline across Thailand.
- In contrast, **stability** was noted in some handicrafts by five informants. Three producers stated that their own enterprises were stable; these were in textiles and fashion accessories (Producers 1, 7) and silver and gem jewellery (Producer 3). Two supporters (15, 16) explained that the state of handicraft production was largely determined by export figure. The monetary value of handicrafts per unit has recently increased as a result of product design and development and branding, although purchasing volumes have declined.
- Handicrafts that have potential for **market expansion**, as mentioned by two informants (Supporter 15, Buyer 23), are small items for home decoration, gifts and fashion accessories for wholesale and retail sales in Asia and Europe. They felt that



the emergence of the ASEAN<sup>1</sup> Economic Community (AEC) would also lead to expansion from a domestic market to a regional one.

- **Improvements** in handicraft production over recent years were noticed by one informant (Supporter 21), especially at the community level, in terms of product style, the production process, the quality of materials and attention to detail.

### 7.1.2 **Finding 2: Factors involved in the development of handicraft enterprises**

The 19 informants who felt that the sector was in decline also talked about the factors involved in the development of handicraft enterprises, presented as themes (A–F) as follows:

**A. Marketing and sales, product design<sup>2</sup> and development and product prices** were cited by 19 informants. 17 of these claimed that producers have limited knowledge and need more knowledge and practice in these areas, e.g. in the identification of potential markets and target customers. Three informants emphasised that many handicraft producers often ignore or underestimate costs such as skilled labour and raw materials (especially locally sourced natural materials) and also do not fully understand pricing.

**B. Divergent and often contradicting views of the development of handicraft production and enterprises** were mentioned by 19 informants in relation to:

- The purposes of handicraft production, including (i) handicraft production to preserve cultural values and traditional culture and (ii) handicraft production for commercialisation, economic benefits and the livelihood of artisans;
- What constitute “appropriate” prices for handicrafts in the marketplace, especially in the view of buyers. They often believed that there are middlemen involved in the supply chain, and so handicrafts are overpriced. In

---

<sup>1</sup> **ASEAN:** “The Association of Southeast Asian Nations” (established in 1967 in Bangkok, Thailand) today includes “the ten Member States of ASEAN” – Indonesia, Malaysia, the Philippines, Singapore, Thailand, Brunei Darussalam (1984), Viet Nam (1995), Lao PDR and Myanmar (1997), and Cambodia (1999) (Association of Southeast Asian Nations Secretariat, 2014a).

<sup>2</sup> **Product design and development:** Regarding this factor, the producers usually articulated in terms of “marketing or markets”. Yet, when producers elaborated further, these terms were meant to include aspects of: 1) a market that would be appropriate to the producers’ capacity; 2) target customers; 3) product design and development to meet market demands and target customers.

contrast, when handicrafts are underpriced, buyers may worry about ethical issues in business as mentioned below;

- Ethical employment and fair trade, including such issues as workers' rights and their benefits according to labour laws, working conditions, employment rate and workplace environment. Business owners, workers and customers may have different perspectives on motivating factors, for example (i) economic-led decision-making for financial gain and (ii) ethical-led decision-making underpinned by concerns about green consumerism and workers' rights and benefits.

**C. Business administration and management** was mentioned by 16 informants as an area in need of improvement. Producers lack:

- A mindset for taking business more seriously, which is to some extent influenced by their attitude towards handicrafts as a hobby, together with a willingness to be distracted by social activities (i.e. traditional ceremonies), resulting for example in delays in the delivery of goods;
- The vision, focus and framework required to run a business;
- The knowledge and confidence required for business administration, in areas such as securing orders, sourcing materials, creating a product brand, product design and development, marketing and trade procedures, logistics and product distribution and financial management;
- Language ability (i.e. English), presenting a communication gap between local producers and international buyers;
- Understanding needs, wants and requirements in a commercial context.

**D. Attitudes towards dealing with and preparation for change**, including a willingness to adapt and develop, was seen as lacking by 16 informants, especially dealing with changes in production development, product design and development, skills development and market demands.

**E. Production costs** were cited by 15 informants. Six mentioned that handmade production is largely being replaced by industrial production with the use of machinery, or integrated into industrial production due to considerations of productivity related to costs and time. The costs of raw material and labour in particular were cited as problematic issues:

- *Cost of raw material* – 15 informants mentioned that costs have increased due to the scarcity of raw materials locally, and that the prices of imported materials fluctuate. The scarcity of raw materials at the local level is a *critical* issue driving up production costs, product prices and affecting the competitiveness of the business.
- *Cost of labour* – Six informants mentioned that cost of labour has increased due to a shortage of skilled labour, especially among the younger generation, and the increase in the minimum wage imposed in 2012.

Other costs can be incurred, arising for example from legal issues such as costs incurred in the destination countries for exports and penalties for illegal working, especially in terms of labour and environmental laws.

**F. Other related issues** were mentioned.

- Unexpected issues were mentioned by three informants, such as the loss of skilled craft-masters, political unrest and natural disasters in Thailand, world economic recession, corruption and illegal acts.
- Support from external parties was mentioned by five informants as being to some extent “impractical” for handicraft producers and enterprises. For example, some projects organised by government departments were often inconsistent, intermittent and discontinuous. Staff of academic and research institutions were criticized as being theoretical rather than pragmatic and lacking a business perspective.
- A lack of education and training relevant to the viability and development of handicraft enterprises was cited by two informants. In fact, education and

training could serve as a platform to connect various stakeholders together, i.e. the younger generation, older artisans, handicraft enterprises and potential customers.

### 7.1.3 **Finding 3: Call for change to ensure the continuance of handicraft production**

17 informants<sup>3</sup> across all groups (producers, supporters, buyers) addressed the need for change and development to ensure a long-term viable future for handicraft production. However, they were unsure what kinds of change would be appropriate, and suggestions included, for example:

- Radical changes to improve circumstances at the local level;
- Changes in relation to product design and development to foster market feasibility;
- Changes related to production technology and social development;
- Changes in attitudes towards change itself, in terms of adaptability and development.

Seven informants<sup>4</sup> proposed “sustainable development” as a direction for change relevant to handicraft enterprises. Some elaborated on this, saying that that progressing towards sustainable development would require:

- *Collaboration* among “various [groups of people from different] levels” (n=4);
- *Agreement* on *goals* at national level, especially between government, private companies and other stakeholders (n=2);
- *Systems* to facilitate change towards sustainable development (n=5). Other terms related to “system” were used, including *direction* (n=4), *approaches* (n=4), *vision and policy* (n=2), *framework* (n=1), *ingredients* (n=1), *strategy* (n=1) and *communication* (n=1).

---

<sup>3</sup> 17 informants: P3, P4, P6, P7, P9, P10, S11, S12, S13, S15, S16, S17, S20, S21, B23, B24, B25.

<sup>4</sup> Seven informants: P4, P10, S13, S15, S16, S17, S20.

## 7.2 THE PERSPECTIVES OF PEOPLE INVOLVED IN THE HANDICRAFTS SECTOR ON SUSTAINABILITY

---

This section presents the following research findings:

- Finding 4: The relationship between handicraft production and the Triple Bottom Line of Sustainability (Elkington, 1997);
- Finding 5: Other elements contributing to/affecting the sustainable development of handicraft enterprises;
- Finding 6: Problematic issues related to the understanding of sustainability;
- Finding 7: Core elements necessary for the viability of handicraft production and their relationship to design and the fourth element of sustainability;
- Finding 8: Handicrafts as national identity – going beyond monetary value and economic indicators.

In Thailand, the terms “sustainability”, “sustainable development” and “*design for sustainability*” are publicized in various ways, e.g. seminars, development projects, newsletters and advertisements, in the private and public sectors. These terms are articulated in Thai as follows:

- **Sustainability:** in Thai *kwam yangyuen*, meaning permanence, endurance, longevity, perpetuity, eternity;
- **Sustainable (development):** in Thai (*kan phatthana yang*) *yangyuen*, meaning development or progress, enduring;
- **(Design for) sustainability** in Thai (*kan okbaep yang*) *yangyuen*, meaning enduring design; people often say “sustainable design” instead of “*design for sustainability*”.

These terms are considered part of *general vocabulary*, rather than describing the in-depth meaning of sustainability. In general, people in the handicrafts sector have not yet fully understood in any depth the meaning of the term “sustainability” in its contemporary usage.

**7.2.1 Finding 4: The relationship between handicraft production and the Triple Bottom Line of Sustainability (Elkington, 1997)**

In order to determine the understanding and perceptions of sustainability of people in the handicrafts sector, questions A–C were formulated for the interviews:

- A. Have you heard of the terms “sustainability”, “sustainable development” and “*design for sustainability*”?
- B. What is your understanding of the term “sustainability”?
- C. How does sustainability (as a concept) apply to handicraft enterprises?

Additionally, question D was based on the Triple Bottom Line of Sustainability (Elkington, 1997), and was used as a follow-up question in case informants simply replied “I don’t know” when asked about their understanding of sustainability.

- D. How does handicraft production affect society, the economy and the environment?

The “don’t know” answer was in fact common among the producers group. However, when responding to this follow-up question, the producers were able to explain the relationship between handicraft production and sustainability. Informants’ understanding of the relationship between the handicraft production and sustainability is analysed below:

**Table 7.2(a) Handicraft production in relation to the Triple Bottom Line of Sustainability – when producers expressed uncertainty about the term**  
(Source: Semi-structured interviews with 26 informants)

Aspect	Producers										Supporters										Buyers						Number of informants		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26			
Environment											1				1	1	1		1	1	1	1			1	1		10	
Society											1	1	1	1	1	1	1	1		1	1	1	1			1			12
Economics											1	1	1	1		1	1		1	1	1	1	1	1	1	1	1	14	
Other elements											1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16	
Don't understand / unclear	1	1	1	1	1	1	1	1	1	1																		10	
																										62			

**Table 7.2(b) Handicraft production in relation to the Triple Bottom Line of Sustainability – when producers were asked Question D (society, the economy and the environment)**

(Source: Semi-structured interviews with 26 informants)

Aspect	Producers										Supporters										Buyers						Number of informants	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26		
Environment	1			1		1			1		1				1	1	1		1	1	1			1	1			14
Society	1	1	1	1		1			1	1	1	1	1	1	1	1	1		1	1	1	1		1			19	
Economics		1	1	1		1	1		1	1	1	1	1	1		1	1		1	1	1	1	1	1	1	1	1	21
Other elements					1	1	1						1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	19
Don't understand / unclear									1																			1
																											74	

The results show that the informants believed that handicraft *production* contributes to the three elements of sustainability, with a strong emphasis on the economy (n=21) and society (n=19). The environment ranks last (n=14), whereas 19 informants talked about other elements (explained further in Section 7.2.2).

19 informants were of the opinion that three elements of sustainability could be found, especially in the traditional production of handicrafts, whereby artisans carry out handicraft production as domestic work in relation to local ways of living. The traditional production of handicrafts is accountable for traditional knowledge, which becomes part of the social foundation. It also contributes to employment and income generation, especially at the local level. In addition, handicrafts, as a traditional culture, can represent “identity” and build on “soft power” both at the local and national level. The power of identity is tangible, yet cannot be measured in numbers by itself.

**7.2.2 Finding 5: Other elements contributing to/affecting the sustainable development of handicraft enterprises**

19 informants talked about other elements they felt were relevant to the sustainable development of handicraft enterprises. 177 keywords were mentioned, some of which were repeated across the three groups (producers, supporters, buyers). These keywords were then classified into themes and are described as follows:

- The lack of an in-depth understanding of sustainability (cited by 19 informants; see Section 7.2.3 (Finding 6));
- Marketing and sales, product design and development and product prices (cited by 17 informants; see Section 7.1.2 (Finding 2-A));

- Business administration and management  
(cited by 16 informants; see Section 7.1.2 (Finding 2-C));
- Production costs  
(cited by 15 informants; see Section 7.1.2 (Finding 2-E));
- Other factors, including unexpected issues, impractical support from external parties, education and training, corruption and illegal acts  
(cited by five informants; see Section 7.1.2 (Finding 2-F)).

In addition to this, some felt that progress towards sustainable development would depend very much on “business owners/top management executives” (one informant), and whether or not they would prefer to include sustainability in their “business practices” (12 informants).

### **7.2.3 Finding 6: Problematic issues related to the understanding of sustainability**

19 informants discussed issues related to an in-depth understanding of sustainability, which to some extent affects how far handicraft enterprises make progress towards sustainable development. The issues are sorted into themes as follows:

- Lack of clarity about the meaning and in-depth understanding of sustainability;
- General understanding of sustainability;
- Different scope and frameworks and the possibility for working towards sustainability.

#### **Lack of clarity about the meaning and in-depth understanding of sustainability**

11 informants<sup>5</sup> from across the groups mentioned this issue. Five supporters said that the meaning of sustainability was “unclear” and “too abstract”, and there were “too many” “semantic” definitions of the words “sustainable” and “sustainability”, which led to “confusion”, “conflict”, “misinterpretation” and “various (mis)understandings”. In relation especially to the term “sustainable handicrafts”, four producers responded similarly, saying that they had “never heard of it”, that they had “heard of it, but [did not] understand what it means in detail”, or that they “thought of it as a slogan”. Three of them from across the groups responded “why worry?” about sustainability when “living for survival is more important”. Two supporters

---

<sup>5</sup> 11 informants: P1, P3, P4, P6, S11, S15, S16, S17, S19, S20, B25.



mentioned that the “in-depth meaning of sustainability” had been “weakly transmitted” among “promotion organizers”, and so there was a “lack of in-depth understanding” in general.

### **General understanding of sustainability**

In the context of the handicrafts sector of northern Thailand, 13 informants<sup>6</sup> representing all the groups suggested<sup>7</sup> that sustainability or sustainable development was *generally* perceived as living with:

- *Continuity* – the state or quality of being continuous (Oxford English Dictionaries, 2013);
- *Continuance* – keeping up, going on with, maintaining or prolonging (an action, process, state, etc.) (Oxford English Dictionaries, 2013).

The informants’ conceptions of sustainability can be grouped as follows:

- Classic, inheritance, i.e. of skills from ancestors;
- Sustaining, remaining the same, as long as it could be;
- Living without [financial] troubles, living like this as usual;
- Forever, never die, lasting forever;
- Continuous development, constantly doing things.

In contrast, five supporters commented that they really “wanted people to think of sustainability *beyond just sustaining*”.

### **Different scope and frameworks and the possibility for working towards sustainability**

Four informants<sup>8</sup> from across the groups talked about “**scope and frameworks** for working towards sustainability”. One buyer (B22) mentioned that “sustainability in the contexts of Western society and of Thailand and Asia [were] not the same”, pointing out that “sustainability in the Western context involves other elements, e.g. product design and

---

<sup>6</sup> **13 informants:** P4, P6, P7, P10, S14, S15, S16, S17, S19, S21, B22, B24, B26.

<sup>7</sup> **These responses** include those from the surveys on the general understanding of sustainability conducted by the informants with their contact groups, e.g. end-suppliers, business-owners.

<sup>8</sup> **Four informants:** P1, S11, S17, B22.

development, environmental care, sources of raw materials and renewable sources and the disposal of products". Another supporter (S11) said that "sustainability in Western society is in fact about finding a way to correct the unexpected results of the Industrial Revolution and industrial manufacture that began in Europe a long time ago, e.g. over-consumption, [which becomes a problematic issue at the international level]", while one producer (P1) pointed out that sustainability is "[a global agenda], addressing problematic issues across the world", but was unsure about "what to do at the local level".

Five informants<sup>9</sup> from across the groups were curious about **the possibility of implementing sustainability** in the context of handicraft production. A supporter (S17) admitted that "there are gaps in the different perspectives at the macro- and micro-levels, e.g. between local communities and government agencies, for working towards sustainability". A supporter (S20) mentioned that only a few people in Thailand are interested in or fully understand sustainability". Three informants (P10, B24, B25) felt that sustainability, as a concept, was "great, but the [correct] answer is really difficult", and two buyers (B24, B25) said that this was especially problematic "when considering the whole supply chain of a global market".

One buyer (B25) gave an example of international trade and its complicated issues of the "externalization and exploitation of labour and raw materials by traders in foreign countries, which often lead to the reduction in and depletion of natural resources in the source countries". This informant elaborated further, as follows. Although some companies claim to adhere to the principles of corporate social responsibility (CSR), e.g. with campaigns for using reclaimed wood and reforestation, in the informant's opinion, it is mathematically impossible to be sustainable when considering the numbers of trees (i.e. teak trees) from source countries and the number of years it takes for trees to grow. Moreover, buyers can move to countries that have rich sources of natural materials and less rigorous legal constraints, and it is difficult to keep accurate figures for the raw materials used in handicrafts. The way items are labelled in a bill of lading for custom checks was an example of a gap in the application of the legal system, resulting in regulations being sidestepped. Implementing sustainability in the context of international trade is not easy at all.

---

<sup>9</sup> **Five informants:** P10, S17, S20, B24, B25.

Overall, the question raised by these five informants was “how the implementation of sustainability could be successful”.

#### **7.2.4 Finding 7: Core elements necessary for the viability of handicraft production and their relationship to design and the fourth element of sustainability**

In response to a question about the core elements of handicrafts to ensure continuity of production, the 26 informants mentioned altogether 49 keywords. Each keyword was used by a different number of informants. For example, 15 informants mentioned “skills and traditional practices”, while “pride” was mentioned by one informant.

**The most frequently mentioned keywords**, each of which was mentioned by more than 10 informants, are:

- Skills, practice, dexterity, i.e. in terms of traditional skills (n=15);
- Design in terms of product appearance and the processes of generating new ideas and the creation of things (n=13);
- The emotional attachment and spiritual value associated with products, i.e. satisfaction, delight, surprise, continuance of inherited skills and knowledge, a lifetime of experience and learning, appreciation of nature, fascination (seeing beauty in making handicrafts) (n=10). Several informants gave particular prominence to “fascination” and “value”;
- Uniqueness and differentiation (n=10).

Keywords with similar meanings were then put together into nine themes (see Table 7.3). These themes are related to an aspect of “personal meaning” (i.e. spirituality, inner value, individuality and identity), as identified in Walker’s Quadruple Bottom Line of Sustainability (Walker, 2011). The informants identified traditional practices and skills as the core of handicraft production. However, they also suggested that the traditional production of handicrafts needs development and change in relation to customers’ preferences in potential markets to help ensure the viability of handicraft communities. Design is mentioned as an element that can enhance developments in traditional crafts for marketing in many ways, e.g. product design and development with a unique identity, packaging design and branding.

**Table 7.3 Core elements necessary for the viability of handicraft production  
– classified by themes**

(Source: Semi-structured interviews with 26 informants)

<p><b>Theme 1: Traditional practice and skill</b></p> <ul style="list-style-type: none"> <li>▪ The regular practice of making crafts with the use of specific materials, tools, equipment and technology over a long period of time, will lead to skill, dexterity and wisdom.</li> </ul>
<p><b>Theme 2: Markets and customers</b></p> <ul style="list-style-type: none"> <li>▪ Marketing and branding</li> <li>▪ Product differentiation</li> <li>▪ Specificity, i.e. for target customers</li> <li>▪ Storytelling, i.e. history and legends</li> <li>▪ Cost and price</li> </ul>
<p><b>Theme 3: Development and change</b></p> <ul style="list-style-type: none"> <li>▪ Through design (in terms of product appearance and the processes of generating new ideas and creating things)</li> <li>▪ As something which requires direction(s)</li> <li>▪ By integrating other contexts with traditional crafts (e.g. locality + modernity + function; East + West)</li> </ul>
<p><b>Theme 4: Knowledge and local wisdom</b></p> <ul style="list-style-type: none"> <li>▪ Learning and understanding oneself and others</li> <li>▪ Know-how and knowledge transfer through the making of handicrafts</li> <li>▪ Local wisdom accumulated and transferred over generations</li> </ul>
<p><b>Theme 5: Unique identity</b></p> <ul style="list-style-type: none"> <li>▪ Entity/signature</li> <li>▪ Roots and origin</li> <li>▪ Thai characteristics, i.e. fun and happiness</li> <li>▪ Handmade</li> </ul>
<p><b>Theme 6: Psychological needs/desires</b></p> <ul style="list-style-type: none"> <li>▪ Emotional attachment and spiritual value come from within the products, i.e. satisfaction, delight, surprise, continuance of inherited skills and knowledge, a life of experience and learning, appreciation of nature, fascination (seeing beauty in making handicrafts), love, care, wholehearted tenderness and soul – all of which have meaning for a person</li> </ul>
<p><b>Theme 7: Physical needs/desires</b></p> <ul style="list-style-type: none"> <li>▪ Functionality in response to human needs for living (ways of life)<sup>10</sup> and lifestyles, i.e. of customers</li> <li>▪ Quality and repair of antique items</li> </ul>
<p><b>Theme 8: Sources of inspiration and uniqueness</b></p> <ul style="list-style-type: none"> <li>▪ Religious and cultural beliefs</li> <li>▪ The particularities of localities, such as traditional culture and handicrafts, materials, people (individuals, families, communities) and their social patterns</li> </ul>
<p><b>Theme 9: Attitudes/characteristics of craftspeople</b></p> <ul style="list-style-type: none"> <li>▪ Patience and perseverance</li> <li>▪ Attention to detail and finesse</li> <li>▪ Pride</li> <li>▪ Adaptability</li> </ul>

<sup>10</sup> **Ways of life** are associated with locality and are distinguishable through food, dress, dwelling, customs/traditions, language, occupation, beliefs and folk art (S20).

## 7.2.5 Finding 8: Handicrafts as national identity – going beyond monetary value and economic indicators

The finding in Section 7.2.1 suggests that handicraft production usually does offer socio-economic benefits, as well as relating to environment care. However, six informants<sup>11</sup> asserted that a handicraft business is expected to earn a *small* profit, especially when compared with other businesses. And, it can be a source of an extra income.

- *“If you ask whether artisans can make a living with their handicrafts, I am not sure whether they can live off of their skills. Sadly, I don’t think they do. ... However, I don’t know how handicrafts have survived till now – by making the same things or undeveloped products. They may just produce enough to serve local needs.” (Supporter 19)*
- *“The handicraft business can be viable, but not earn a very large profit.” (Buyers 24, 26)*
- *“Our business does not make such a large profit because we pay tax correctly and according to the laws.” (Buyer 24)*
- *“Specifically in the northern region, I would say that handicraft production is unlikely to be a major source of income to families ... Therefore, the relevance of handicrafts as a source of income has decreased – and not only in the northern region; in fact it’s the same in other regions. However, I would say that if handicrafts became a part of tourism, their relevance could remain, although they will not be so important on their own. Handicrafts need to be part of something else.” (Supporter 14)*

Five informants identified reasons for the discontinuance of handicraft businesses as follows:

- Workers seeking alternative jobs for better income, especially among the younger generation, who prefer salaried jobs such as in industrial factories, or ones that offer a better lifestyle, e.g. business companies or shops related to tourism (mentioned by three informants);

---

<sup>11</sup> **Six informants:** P2, S14, S19, B24, B25, B26.

- Insufficient capital investment, especially in raw materials and production (mentioned by two informants);
- Changes in social structure, lifestyles and markets (mentioned by two informants).

Nevertheless, two informants who were private investors added that, “handicraft production is important to Thailand as it represents cultural heritage and national identity”.

- *“We do love ... a Thai company [selling handicrafts] with a good reputation for 75 years. We don’t want the company to be closed down. So, we help to invest in this company to continue.” (Buyer 26)*
- *“A key issue in handicrafts is not about growth. It’s actually about the **support of national identity**, which is called **soft power**. This is very important and different from support for growth in terms of GDP.<sup>12</sup> Handicrafts are something necessary for Thailand to have because handicrafts are part of everything. Handicrafts are an element of the identity of Thailand and then the nation as a brand. If this kind of soft power went, there would be no **national identity** ... It’s necessary to retain the handicraft production as a foundation for the benefits of other activities and beyond, such as tourism, Thai arts, design and other industries. Handicrafts will become fewer in quantity, but their importance will increase ... The value of handicrafts is tangible/substantial, but cannot be split up. Look at Chiang Mai and Bangkok, people go to Chiang Mai because it’s not the same as Bangkok. Why? The next question, what’s different – handicrafts? However, we cannot put into percentages how many per cent of handicrafts attract people to come. Nevertheless, we understand that tourism is an important strategy for income generation in Chiang Mai, e.g. umbrellas from the Boe Sang district. In terms of income generation, handicrafts are an important component of other things, and not just for themselves”. (Supporter 14)*

---

<sup>12</sup> **GDP:** Gross Domestic Product is “the monetary value of all the finished goods and services produced within a country’s borders in a specific time period, though GDP is usually calculated on an annual basis ... GDP is commonly used as an indicator of the economic health of a country, as well as to gauge a country’s standard of living. Critics of using GDP as an economic measure say the statistic[s] [do] not take into account the underground economy – transactions that, for whatever reason, are not reported to the government. Others say that GDP is not intended to gauge material well-being, but serves as a measure of a nation’s productivity, which is unrelated” (Investopedia US, 2013).

Although handicraft production is losing economic importance if measured purely in monetary terms (Section 7.2.4), this does not mean the handicrafts sector is not worth taking care of. Its relevance still remains as the *foundation* of national identity and as something that *supports* other individual and business activities. Ironically, traditional crafts are in decline and traditional ways of living are fading away from Thai society.

### **7.3 THE SUPPLY CHAIN OF THE HANDICRAFTS OF NORTHERN THAILAND, INCLUDING HANDICRAFTS WITH STRONG POTENTIAL, POTENTIAL MARKETS AND DIRECTIONS FOR DEVELOPMENT**

---

This section presents four research findings:

Finding 9: The supply chain of the handicrafts of northern Thailand;

Finding 10: Handicrafts with strong potential for development for long-term viability;

Finding 11: Potential markets for handicrafts and market components;

Finding 12: Directions for development of the handicrafts sector.

#### **7.3.1 Finding 9: The supply chain of the handicrafts of northern Thailand**

This finding emerged from the data collected from the semi-structured interviews. None of the ten interview questions (Appendix B) enquired directly about the supply chain. However, the informants often explained roles, networks, workplaces and business types in answer to follow-up questions.

The supply chain comprises three domains: supply, marketplace and demand – and there are various stakeholders. The informants used more than 30 terms to describe various stakeholders, which this research identifies into groups as follows.

- *Handicraft communities or producers* include artisans, the leaders of handicraft communities and their families in villages.
- *Small- and medium-sized enterprises (SMEs)* represent a group of people who have registered a company for business purposes.
- *Traders* include middlemen, merchants, forwarders, exporters and importers.
- *Distributors* include sellers, retailers, wholesalers and marketers.

- *Buyers* include to corporate buyers, business buyers, project buyers and individual buyers.
- *Supporters* are the people or organizations involved directly or indirectly in the development of handicrafts, e.g. designers, government agents, craft associations.
- *Investors* are the people investing in handicraft enterprises for particular purposes, e.g. as business partners.

**Handicraft communities and SMEs** are the core groups for the supply of handicrafts.

*Handicraft communities* include artisans and their families in villages. Many of them work at home or in a shared workspace, e.g. the house of the group leader, a craft cottage or a cooperative building. A number of them are older artisans past normal retirement age or above 50 years old. In a village, a craft community includes between 10 and 20 families or 50 to 100 people. Handicraft communities also have links with SMEs and large companies, serving as part of their production process.

*SMEs* represent a group of people who have registered a company for business purposes. In Thailand, SMEs are categorized as engaged in any of four main activities: manufacturing, trade (wholesale), trade (retail) or service – based on either or both of two criteria: number of employees and fixed assets value (Association of Southeast Asian Nations Secretariat, 2011, p.58).

**Table 7.4 Categories of small- and medium-sized enterprises (SMEs) in the context of Thailand**

(Source: Association of Southeast Asian Nations Secretariat, 2011, p.58)

<b>Types</b>	<b>Sectors</b>	<b>Numbers of Employees</b>	<b>Asset Value* (Million Baht)</b>
<b>Small</b>	Manufacturing	Up to 50	Up to 50
	Trade (Wholesale)	Up to 25	Up to 50
	Trade (Retail)	Up to 15	Up to 30
	Service	Up to 50	Up to 50
<b>Medium</b>	Manufacturing	50-200	50-200
	Trade (Wholesale)	26-50	50-100
	Trade (Retail)	16-30	30-60
	Service	51-200	50-200

\*On September 14, 2011, the exchange rate was at 1 USD = 30.29 baht.

As suppliers of handicrafts, SMEs serve primarily as job allocators or collectors of craftworks, producers of handicrafts and end-suppliers. They usually operate in office buildings or a home office, and deal with a network of handicraft communities and factory-based companies for



production. A number of owners of SMEs are in fact children of older artisans, or have lived in an area where handicrafts are produced.

**Designers** in the supply chain of handicrafts were identified as part of groups of *SMEs and large enterprises and buyers*. Only a small number of designers became involved in *handicraft communities* at the local level. In terms of their location in relation to the place of handicraft production, three groups of designers are identified, namely (i) designers living locally, i.e. in the same province as the producer, (ii) designers living at a distance from the producer, i.e. in urban areas in other provinces/regions and (iii) designers living in foreign countries. They work for example as employees of companies, freelancers for a design service for companies, or design consultants to business owners. Their roles can vary from illustrators, through conceptual designers, product designers, Web designers, events designers/organizers, designer makers (i.e. for product samples), sourcing technicians, people who draw up specifications, job allocators for production, collectors of products (parts or finished products) to quality controllers.

### **7.3.2 Finding 10: Handicrafts with strong potential for development for long-term viability**

Of the list of ten product categories,<sup>13</sup> the informants were asked about handicrafts with strong potential for development for long-term viability. They generally suggested two or three types of handicraft and explained their reasons. Keywords relating to the criteria for their selection were classified into main groups as follows:

---

<sup>13</sup> **Ten product categories** included: carpets, celebration items (e.g. for wedding ceremonies, birthdays, local festivals), furniture, garments and textiles, gifts, home decoration, jewellery, toys, wickerwork and yarn products.

**Table 7.5 Criteria for the selection of handicrafts  
with strong potential for development for long-term viability**

(Source: Semi-structured interviews with 26 informants)

Production capacity	Relating to craftspeople and their (high) levels of skill and unique techniques in production, the availability of raw material locally (e.g. cotton), production costs (i.e. labour and material costs) and sustainable development
Product viability	Relating to ability to develop products to satisfy critical requirements, such as products with practical function that suits customers' lifestyles, product development for market feasibility, products with a price appropriate for the marketplace, environmentally friendly products and fair trade products
Market feasibility	Relating to the chance that products can enter well established markets or expand to other market segments in which, for example, products can be positioned with a high price, have high market share, high frequency or volume of trade and perhaps face fewer competitors
Legislation	Relating to various laws (e.g. labour laws, environmental laws and import/export laws) which govern the production and distribution of handicrafts in Thailand and destination countries worldwide

Of the 26 informants, producers 1, 2, 3, 4, 6 and 7 did not give opinions because they felt uncomfortable about making a judgement due to their limited knowledge of other handicrafts in the field. Supporter 12 divided the market into tourism, export and domestic and selected the top-three handicrafts according to these markets, and Supporter 19 selected handicrafts based on market value (monetary value) and the availability of materials.

Points were awarded to the top three handicrafts according to their development potential by informants as follows:

- First priority (very high potential)                      3 points;
- Second priority (high potential)                            2 points;
- Third priority (medium potential)                            1 point.

As a result, **three handicrafts that hold strong potential** for development for long-term viability are identified:

- Furniture made of wood and fibrous plants (30 points)
- Handwoven textiles and garments (29 points)
- Silver jewellery and costume jewellery (27 points)

**Table 7.6 Three handicrafts with strong potential for development and long-term viability – scores breakdown**

(Source: Semi-structured interviews with 20 informants)

Potential Crafts (from literature review)	Producers										Supporters										Buyers						Score				
	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	S11	S12 (Tourist M.)	S12 (Export M.)	S12 (Domestic M.)	S13	S14	S15	S16	S17	S18	S19 (Market Value)	S19 (Material)	S20	S21	B22	B23		B24	B25	B26	
Carpets																															0
Celebration items																															0
Furniture					2			2	3	1	3		3	1		3					3	1									30
Garments and textiles				1							1	2	3	3		2			1	3		2	3	1		2	3	1			29
Gifts								1					3	1		3		2		3					3	1				2	19
Home decorative items								3								2		3	3		2		2	2				3			20
Jewelry					3				2	3	2	1		2	1	1	1		2		1					3	2			3	27
Toys								1		2																					3
Wickerwork									1													3									4
Yam products																															0
																															<b>132</b>

Design was considered in relation to product viability and market feasibility, i.e. product design and development for handicrafts with practical uses relevant to the current lifestyles of customers, especially in the segments of home decoration, gifts and souvenirs. In terms of production capacity, handicraft enterprises are facing a shortage of skilled labour, especially among the younger generation, a shortage of locally available raw materials, increasing costs of labour (the minimum wage was increased in 2012) and in the costs of raw materials for production.

The *quantitative* results shown above are not distinct enough to select one particular handicraft for in-depth case studies for development in relation to *design for sustainability*. Thus, these are combined with a *qualitative* analysis of the advantages and disadvantages of these three handicrafts mentioned by the informants. These are summarised as follows.

- **Furniture made of wood and fibrous plants** – have *disadvantages* in terms of (i) the skills of the craftspeople, which need to be improved, (ii) the shortage of raw materials, i.e. hardwood and the issue of using illegal sources of wood in production and trade, (iii) the increasing costs of labour and (iv) legislation governing the production and distribution of products made of wood/fibrous materials both in Thailand and destination countries worldwide, which were commented on as being rigorous or varied or confusing, i.e. import/export laws and fumigation requirements. However, the *advantage* was described in terms of established markets in the domestic (i.e. tourist market) and international spheres.
  
- **Handwoven textiles and garments** – have *advantages* in terms of (i) the high levels of skill of the craftspeople and their particular production techniques, (ii) the availability of raw materials, i.e. silk and cotton, which are, to some extent, cultivated and produced or could be sourced locally for local production (although this was mentioned as an area in need of development to prevent a shortage of raw materials in the near future), (iii) well-established markets domestically (i.e. the tourist market) and internationally and (iv) possibilities for market expansion to a wide range of product categories, i.e. textiles, fashion accessories and home furnishings. Nevertheless, the *disadvantage* was seen as the increasing cost of labour.
  
- **Silver jewellery and costume jewellery** – have *advantages* in terms of (i) the high levels of skills of the craftspeople and their particular techniques for making products with a unique identity, (ii) the high frequency of traded products in markets and (iii) established markets domestically (i.e. the tourist market) and internationally. However, the *disadvantage* was identified as a lack of sources of raw materials locally, i.e. silver, metal and synthetic beads, which are largely imported from other countries, resulting in fluctuating costs of raw materials.

Next, the concept of “Plus/Minus/Interesting” (PMI)<sup>14</sup> is applied numerically<sup>15</sup> to identify one particular handicraft for in-depth case studies for development in relation to *design for*

---

<sup>14</sup> **Plus/ Minus/ Interesting (PMI)** is introduced “by Edward de Bono in his book *Serious Creativity*” (Mind Tools Ltd., 1996).

<sup>15</sup> Plus (5), Minus (-5), Interesting (2.5).

*sustainability*. A strong negative score is found for the category of furniture made of wood and fibrous plants (-12.5), while handwoven textiles and garments has the highest positive score (17.5), followed by silver jewellery and costume jewellery (10). This indicates clearly that **handwoven textiles and garments** have the greatest potential for development because of advantages in the availability of raw materials locally and well-established markets. This will therefore be taken further for in-depth case studies.

**Table 7.7 Justification for selecting one particular handicraft for in-depth case studies**  
(Source: Semi-structured interviews with 20 informants)

Criteria for Selection	Types of Handicrafts					
	Furniture from wood	Furniture from fibrous plants	Hand-woven textiles	Garments from handmade fabrics	Silver jewelry	Costume jewelry
<b>Production capacity</b>						
Craftspeople with high levels of skill and unique techniques	-5	-5	5	5	5	5
Availability of raw materials in localities	-5	-5	2.5	2.5	-5	-5
Production costs, i.e. labour and material costs	-5	-5	-5	-5	-5	-5
<b>Product feasibility</b>						
Practical function related to customers' lifestyles						
Possibility for the creation of products for market expansion						
Pricing structure						
<b>Market feasibility</b>						
High pricing and high market share						
High frequency of traded products					5	5
Established markets with long-term existence			5	5		
Tourist market	5	5	5	5	5	5
Export market	2.5	2.5	5	5	5	5
Competitors at the international level						
<b>Legislation</b>	-5	-5				
	<b>-12.5</b>	<b>-12.5</b>	<b>17.5</b>	<b>17.5</b>	<b>10.0</b>	<b>10.0</b>

### 7.3.3 Finding 11: Potential markets for handicrafts and market components

The three main markets for handicrafts are:

- Domestic market – Products are sold and delivered within Thailand.
- Export market – Products are shipped from Thailand for distribution to local markets.
- Tourist market – This overlaps with both the domestic and export markets, and is sometimes referred to as a sub-group of exports, namely indirect exports.

In the case of indirect exports, handicrafts usually involve tourism, many of whom are foreign and purchased handicrafts from, e.g. retail shops in hotels and airports.

Of the three main markets, the export and tourist markets are mentioned as having greater potential. Tourism plays a vital role in the sales of products at their point of origin, the distribution of handicrafts to other places, and connecting local handicrafts to global markets.

However, the informants explain that orders for export and from foreign tourists have decreased, due both to the global economic recession and to recent (since 2008) political unrest in Thailand. Inevitably, some handicraft enterprises have recently re-focused on gaining market share from domestic sales.

Informants also mentioned other market components, including: market segmentation, target customers and product positioning (STP) that hold high potential for handicrafts. These are summarized as follows.

**Table 7.8 Market components that have high potential for handicrafts**

(Source: Semi-structured interviews with 26 informants)

Distribution channel <sup>16</sup>	Market segmentation	Target customers	Product positioning	Sales quantity	Merchandising <sup>17</sup>
Domestic	Art and craft	<u>Major customers</u>	<u>By style</u>	<u>Sales system</u>	Chain stores
Export	Craft and design	<u>by country</u>	Authentic/original	Retail sales	Corporations/ organizations
Tourist	Niche market	USA	Commercial	Wholesale	Department stores
- Indirect export		Europe	Contemporary		Direct sales
- Foreigners	<u>By-product categories</u>	Japan	Ethnic/tribal	<u>Sales units</u>	Events, road shows
- Thais	Fashion	<u>Emerging customers by country or region</u>	Intricate	One-off	Exhibitions
	Furniture		Original design	Limited edition	Hotel shops
	Gifts and Souvenirs	Brunei	Replica	Batch lot	Local markets
	Home decoration	China*	Traditional and commercially traditional	<b>Mass quantities</b> <sup>19</sup>	Project clients
		India*	Utilitarian		Restaurants
		Indonesia			Specialty shops
		Malaysia	<u>By class division</u>		Tourist venues
		Middle East	High end		Trade fairs
		Russia	Medium high		Websites, online shops
		South Africa			
		Vietnam			
		<u>Characteristics</u>			
		Elderly people*			
		Foreign tourists*			
		Interior designers			
		Organizations			
		Parents			
		Younger generation <sup>18</sup>			

\* Target customers with high purchasing power and in high numbers

<sup>16</sup> **Distribution Channel:** "The way that a company delivers a product or service to its customers" (Macmillan Dictionary, 2009).

<sup>17</sup> **Merchandising:** "The business of arranging and showing products in shops in a way that makes people want to buy them" (Macmillan Dictionary, 2009).

<sup>18</sup> **Younger Generation** is mentioned as a potential group for a viable future for handicrafts, e.g. first-jobbers. Yet, they are found to be fewer in number, both for production and purchasing.

<sup>19</sup> **Mass quantities** for handicraft production is arguably, from the perspectives of producers and supporters, a less efficient way of working, when considering the production capacity of local communities, the natural resources used, working hours, units of work and net profit. The net profit from making lower-quality handicrafts in mass quantities is in fact nearly the same as making high quality handicrafts in small quantities. Generally, mass-produced handicrafts are of low quality and sold at low prices per unit. In contrast, from the perspective of buyers at a global level, there is demand for mass-produced handicrafts in global markets. Nevertheless, these buyers mentioned that handicrafts from Thailand are less competitive, in terms of low price and production capacity, than those of competitors, e.g. in China, Vietnam, Indonesia and India.

#### 7.3.4 Finding 12: Directions for development of the handicrafts sector

Nine informants talked about development directions for the handicrafts sector and the potential areas in which design could make a positive contribution. Six informants suggested *design for sustainability*<sup>20</sup> as a plausible direction for a viable future for the handicrafts sector.

Two informants (S15, S17) identified the traditional production of handicrafts as an area to which design can contribute, especially in product design and development, to connect handicrafts from local communities with potential customers, i.e. urban markets.

Two informants (S16, B26) recommended three main directions: replication, adaptation and innovation, and explained these with examples of the contributions of design.

- **Replication** means remaking handicrafts from a former time with reference to their originality to some extent. *Benjarong* ware is an apt example. This is a type of Thai porcelainware, and due to, e.g. shortages of raw materials, design can be involved in developments in the use of new materials and production processes including the use of technology, while the appearance of the products (forms, colours, patterns) remains the same.
- **Adaptation** refers to handicrafts which are based on traditional production, but with changes in some attributes for other purposes. Design can contribute in terms of product design and development for market expansion, e.g. adjustments to particular forms of *benjarong* ware to make other types of tableware (coffee mugs, plates, tea sets etc.), with the five primary colours remaining in use.
- **Innovation** was briefly mentioned in terms of development that does not adhere to: traditional production (innovation in terms of production process); or to the original appearance of products, including colours, forms and patterns (innovation in terms of product design). Likewise, existing traditions, including traditional skills and a traditional look, can inspire development.

Nevertheless, these informants added that, "some handicrafts should not be changed much, but some need change. Some products can be further developed in these three directions,

---

<sup>20</sup> *Design for sustainability* was mentioned as, e.g. "eco-design", "ecological design", "green design" and "sustainable design" (P4, P6, S11, S12, S16, S20).



while some products have only a few directions for future development". It is suggested that design in the context of handicrafts should retain the identity of localities to some extent. In addition, the informants suggested considering whether to design for (i) large quantities of standardized items, (ii) small quantities of high quality products and diversity or (iii) lifestyle products, especially for the younger generation.

## **7.4 VALIDATION OF THE RESEARCH FINDINGS**

---

Validation of the data and the research findings with experienced practitioners in the field for their feedback and recommendation can help to increase the accuracy and value of the research findings (Hall and Hall, 1996, p.43). Thus, validation of the research findings from semi-structured interviews was undertaken, and is discussed in the following two sections:

- Validation of the research findings via peer review;
- Feedback from the reviewers.

### **7.4.1 Validation of the research findings via peer review**

Validation of the research findings was conducted via peer review in March, August and October–December 2013 in Thailand, Japan and India. Peer review was undertaken through two main channels:

- **Academic conference** – this focused on:
  - The supply chain of the handicrafts of northern Thailand, including handicrafts with strong potential, potential markets and directions for development (Section 7.3);
- **Group discussions** – these focused on:
  - The current situation of the handicrafts sector of northern Thailand (Section 7.1);
  - The perspectives of people involved in the handicrafts sector on sustainability (Section 7.2);

- The supply chain of the handicrafts of northern Thailand, including handicrafts with strong potential, potential markets and directions for development (Section 7.3).

**Academic conference** – this involved peer reviewers appointed by the conference committees and the conference attendees. A *conference paper* was the medium used to discuss the research findings with the reviewers for their feedback and recommendations. The paper, entitled “*Directions for Design Contributions to the Sustainable Development of the Handicrafts Sector in Northern Thailand*” (Chudasri, Walker and Evans, 2013), was submitted to the 5th International Congress of the International Association of Societies of Design Research (IASDR) 2013 for double-blind peer review (two reviewers). This was followed by an *oral presentation* of the conference paper at the 5th IASDR 2013 Tokyo Conference in Japan, which approximately fifteen people attended.

**Group discussions** – were arranged by the researcher with two main groups of reviewers (in Thailand and India). They were contacted directly by the researcher or introduced to the researcher by their academic colleagues for validation of the research findings. *Visualizations of information* (extracted from written information, i.e. a conference paper, a draft chapter) were the medium used to discuss the research findings with the reviewers for their feedback and recommendations. These *visualizations of information about the handicraft enterprises of northern Thailand in relation to design for sustainability* comprised 14 visual units, as follows (see Appendix E).

- 1 Analysis of the handicrafts sector of northern Thailand and its elements
- 2 Call for change and development in the handicrafts sector of northern Thailand
- 3 Factors involved in the handicraft enterprises of northern Thailand
- 4 The supply chain of handicrafts of northern Thailand and the key players
- 5 Three handicrafts with strong potential for development for long-term viability and selection criteria
- 6–8 Potential markets and market components
- 9 Core elements necessary for the viability of handicraft production
- 10–11 Possible areas and directions for the development of handicrafts sector
- 12–14 Sustainability and design in the context of handicraft enterprises

The presentation and discussion of the research findings were arranged as individual sessions, pair sessions and a group session.

- **Group 1: Reviewers in Thailand**

This group comprised eight reviewers in Thailand. The reviewers each had more than 10 years of experience in the fields of craft, design and manufacturing, and were involved directly or indirectly in the handicrafts sector of northern Thailand. Their roles and years of experience are summarised below.

**Table 7.9 Roles and experience of the reviewers in Thailand**

Roles	Reviewers							
	R1	R2	R3	R4	R5	R6	R7	R8
Researcher	✓				✓		✓	
Scholar	✓	✓			✓		✓	
Business owner (Handicrafts)			✓		✓			
Business owner (Design)				✓				
Project/business consultant		✓	✓	✓	✓	✓		✓
<b>Experience (Years)</b>	10+	10+	20+	20+	10+	30+	10+	10+

- **Group 2: Reviewers in India**

Validation of the research findings in India was conducted as part of an Exchange of Scholars joint programme funded by research institutions<sup>21</sup> in Thailand and India. This group comprised six scholars and two members of the Craftroots organization, who with one exception had more than 10 years of experience related to the fields of craft, design and manufacturing in India and the international sphere. In addition, 19 students studying in a handicrafts and design course at undergraduate level also participated.

<sup>21</sup> **Research institutions:** The National Research Council of Thailand (NRCT) and the Indian Council of Social Science Research (ICSSR).

**Table 7.10 Areas of expertise and years of experience of the reviewers in India**

City	Organizations	Individual	Group	Areas of expertise	Experience (years)	Reviewer code
Jaipur	Indian Institute of Crafts and Design (IICD)	2		Handicrafts and design	10+	R9, R10
			19	Handicrafts and design (undergraduate students)	2	R17-G
	Institute of Development Studies (IDS)	1		Cultural history with research into handicrafts	20+	R11
Ahmedabad	National Institute of Design (NID)	3		Industrial design and knowledge management with research into handicrafts	10+	R12
				Communication design and exhibition design with research into handicrafts	10+	R13
				Textile design	20+	R14
	Craftroots	2		Handicrafts and the livelihoods of local artisans	2, 10+	R15, R16

#### 7.4.2 Feedback from the reviewers

Feedback from the reviewers is summarized around the following themes:

- The overall visualizations of information about the handicraft enterprises of northern Thailand in relation to *design for sustainability*;
- Beneficiaries, i.e. those who might benefit from the research findings;
- The research methodology.

##### 7.4.2.1 Feedback on the overall visualizations of information about the handicraft enterprises of northern Thailand in relation to *design for sustainability*

Overall, six academic reviewers<sup>22</sup> (three from Thailand, three from India) and a group of nineteen students in India stated that they had gained a holistic understanding of the handicraft enterprises of northern Thailand, i.e. the factors involved in the handicraft enterprises, the supply chain and the key players, three handicrafts with strong potential for development for long-term viability and selection criteria, potential markets and market components, and sustainability and design in the context of handicraft enterprises.

<sup>22</sup> Six reviewers: R3, R4, R5, R14, R15, R16.

They were able to (i) identify the areas for development, both those which were under-developed and those with potential, (ii) gain a better understanding of the handicraft enterprises and *design for sustainability* and (iii) compare the situations of the handicrafts sector of northern Thailand and those of India (mentioned as being similar in general). In a workshop to rethink a framework for the handicrafts sector of India, the undergraduate students said that this information enabled them to (iv) reflect on the handicrafts sector of India and to establish a framework for it.

Nevertheless, three reviewers<sup>23</sup> in Thailand commented that these visualizations lacked coherence and a clear focus. They also felt that design has a role to play in the handicrafts sector, although it seemed missing or was not fully addressed in this set of visualizations.

These research findings could therefore be improved through:

- Reorganising their contents or reinterpreting them with appropriate descriptive terms;
- Reinforcing the critical findings in a clear and concise manner.

With regard to the three directions for the development of the handicrafts sector (replication, adaptation, innovation), divergent (and contradictory) perspectives were articulated by seven reviewers<sup>24</sup> (two in Thailand, five in India). Two reviewers in India (R12, R13) suggested reconsidering or removing these three directions from the contexts of craft and *design for sustainability* because these directions are subject to individual perspectives considering several variables,<sup>25</sup> and are often different and disputable and not easy to agree upon.

One reviewer in India (R14) questioned a research approach that considered various handicrafts as representing the *whole* of the handicrafts sector, rather than an in-depth study of a particular handicraft. Many diverse types of handicrafts are produced under a variety of conditions (e.g. local geography, locally available raw materials, the ways of living of the ethnic group, their needs for functional objects, the number of artisans and their levels of skill, the tools and materials available in locales, and production techniques and costs). The research findings from an approach that considered the whole of the handicrafts sector might

---

<sup>23</sup> **Three reviewers:** R5, R6, R8.

<sup>24</sup> **Seven reviewers:** R2, R8, R9, R10, R12, R13, R17.

<sup>25</sup> **Variables:** products, styles, materials, production processes, techniques, technologies, time and era, i.e. tradition and modernity, changing lifestyles and market demands, and groups of artisans.

not be applicable to each of the many diverse types of handicrafts that exist in a region and also other regions. In fact, handicraft production is about specificity, locality and ethnicity. A discussion of handicrafts which is based on generalization can be problematic. The reviewer therefore suggested researching particular groups of handicraft(s), classified by product categories or groups of skilled artisans.

#### **7.4.2.2 Feedback regarding beneficiaries, i.e. those who might benefit from the research findings**

Potential beneficiaries of the research findings were identified from discussions with the thirteen reviewers<sup>26</sup> (six in Thailand, seven in India) and the group of nineteen undergraduate students in India. Potential beneficiaries include:

- Artisans, handicraft communities/enterprises;
- Buyers/merchandizers of handicrafts;
- Designers, design researchers, design educators, design students;
- Project managers, business owners;
- Policymakers, strategic planners.

Especially, if these stakeholders are involved in educational institutions, research institutions, government agencies, non-governmental organizations (NGOs) and companies.

**Educational institutions** were mentioned by eight reviewers<sup>27</sup> (three in Thailand, five in India), especially those that offer courses related to craft, design, business and sustainability to students at undergraduate and postgraduate levels. Examples of courses/projects mentioned by the reviewers for which the research findings could be beneficial for include:

- *Design for sustainability* in the context of handicraft enterprises (seven reviewers);
- Knowledge management and knowledge transfer, i.e. traditional knowledge of handicraft production and new knowledge (such as marketing and production technology) (two reviewers);

---

<sup>26</sup> **Thirteen reviewers:** R1, R3, R4, R5, R6, R7, R9, R10, R11, R12, R13, R15, R16.

<sup>27</sup> **Eight reviewers:** R1, R3, R4, R9, R10, R11, R12, R13.

- Community development, i.e. the livelihoods of local artisans and the viability of handicraft communities via, e.g. development in traditional production, product design and development (one reviewer).

Nevertheless, two reviewers addressed a challenge in developing a course structure that can effectively provide craft skills and traditional practice along with other kinds of new knowledge, e.g. marketing and information technology.

**Research institutes** were mentioned by six reviewers<sup>28</sup> (two in Thailand, four in India) as bodies which could benefit from the research findings, i.e. by taking them into consideration when writing proposals for research projects for future development. Examples of further research projects were mentioned in the spheres of:

- The establishment of organizations, such as non-governmental organizations (NGOs), or academic institutions associated with craft and *design for sustainability*;
- The establishment of courses in craft and *design for sustainability*;
- Knowledge exchange between groups of artisans, designers and business developers and between various countries, e.g. through craft and design exhibitions and field studies, especially in crafts production and distribution;
- *Design for sustainability* in the context of handicrafts through case studies, e.g. in other countries, which would be based on the current research methodology and research findings;
- A methodology for bringing together the preservation and development of handicrafts of Thailand for sustainability.

**Government agencies and non-governmental organizations** were mentioned by seven reviewers<sup>29</sup> (two in Thailand, five in India), i.e. those involved in national development policy and development programmes. This group could benefit from the research findings by taking them into consideration for the development of policies or development programmes, such as:

---

<sup>28</sup> Six reviewers: R5, R6, R12, R13, R15, R16.

<sup>29</sup> Seven reviewers: R5, R6, R11, R12, R13, R15, R16.

- The OTOP<sup>30</sup> projects for community development (two reviewers);
- A movement in addition to the art-craft approach towards a craft-design approach (one reviewer);
- A policy of handicrafts and *design for sustainability* targeted primarily at producers of handicrafts (two reviewers).

**Companies** were mentioned by five reviewers<sup>31</sup> (three in Thailand, two in India), i.e. groups of strategic planners and designers. The visualizations covered comprehensive elements of handicraft enterprises in relation to *design for sustainability*, which can help the members of such companies to gain a holistic understanding of handicraft enterprises and to identify potential areas for *design for sustainability*, e.g. developments in production and products in response to potential markets. Also, it can help to bridge the gap in perspectives between project team members, e.g. young designers (i.e. newly graduated students), design directors, project managers and business owners.

#### 7.4.2.3 Feedback regarding the research methodology

Three reviewers<sup>32</sup> (two in Thailand, one in India) discussed the research methodology that the field research was based on a *grounded-theory approach* that the researcher went into the field without any existing theoretical framework, although it was guided by the research questions with respect to the triple and quadruple elements in sustainability. (Explanation about grounded-theory is provided in Section 6.0).

Reviewer 5 explained that doing research with case studies from a particular country (Thailand) may be regarded by some people as having little value. Likewise, the research methodology is valuable and may be applicable to further research in craft and *design for sustainability* in other countries, e.g. Sri Lanka or Indonesia. If grounded-theory is employed as a *systematic research methodology* and tested on several cases and the data collection and analysis become valid, this could lead to *theory-building* in the future.

---

<sup>30</sup> OTOP: One Tambon [district] One Product.

<sup>31</sup> Five reviewers: R3, R4, R5, R15, R16.

<sup>32</sup> Three reviewers: R5, R7, R14.



## **7.5 CHAPTER SUMMARY**

---

This chapter has presented the research findings from an investigation into the handicrafts sector of northern Thailand, using semi-structured interviews as a strategy to collect primary data. This involved 26 informants with roles in the handicrafts sector of the region as producers, supporters and buyers. 12 research findings are identified, which were validated by experienced practitioners in the fields of craft, design and manufacturing in Thailand, India and Japan in 2013. The research findings are summarised below.

The next chapter will present the research findings from an investigation into the handwoven textiles and garments of northern Thailand, using ethnographic case studies as a strategy to collect primary data.

**Table 7.11 Summary of research findings from the semi-structured interviews**

Subject of analysis and research findings	Section
<b>The current situation of the handicrafts sector of northern Thailand</b>	
<p><b>Finding 1:</b> Current state of handicraft production in northern Thailand</p> <ul style="list-style-type: none"> <li>o Declining – in the handicrafts sector as a whole</li> <li>o Stable – in some handicraft production</li> <li>o Handicrafts that have potential – for market expansion</li> <li>o Improvements – in handicraft production</li> </ul>	7.1.1
<p><b>Finding 2:</b> Factors involved in the development of handicraft enterprises</p> <ul style="list-style-type: none"> <li>o Marketing and sales, product design and development, product prices</li> <li>o Divergent and often contradicting views of the development of handicraft production and enterprises</li> <li>o Business administration and management</li> <li>o Attitudes towards dealing with and preparation for change, including a willingness to adapt and develop</li> <li>o Production costs (i.e. cost of raw materials, cost of labour)</li> <li>o Other related issues (i.e. unexpected issues, impractical support from external parties, a lack of education and training relevant to the viability and development of handicraft enterprises)</li> </ul>	7.1.2
<p><b>Finding 3:</b> Call for change to ensure the continuance of handicraft production</p>	7.1.3
<b>The perspectives of people involved in the handicrafts sector on sustainability</b>	
<p><b>Finding 4:</b> The relationship between handicraft production and the Triple Bottom Line of Sustainability (Elkington, 1997)</p>	7.2.1
<p><b>Finding 5:</b> Other elements contributing to/affecting the sustainable development of handicraft enterprises</p> <ul style="list-style-type: none"> <li>o The lack of an in-depth understanding of sustainability</li> <li>o Marketing and sales, product design and development, product prices</li> <li>o Business administration and management</li> <li>o Production costs</li> <li>o Other factors, including unexpected issues, impractical support from external parties, education and training, corruption and illegal acts</li> </ul>	7.2.2
<p><b>Finding 6:</b> Problematic issues related to the understanding of sustainability</p> <ul style="list-style-type: none"> <li>o Lack of clarity about the meaning and in-depth understanding of sustainability</li> <li>o General understanding of sustainability</li> <li>o Different scope and frameworks and the possibility for working towards sustainability</li> </ul>	7.2.3
<p><b>Finding 7:</b> Core elements necessary for the viability of handicraft production and their relationship to design and the fourth element of sustainability</p>	7.2.4
<p><b>Finding 8:</b> Handicrafts as national identity – going beyond monetary value and economic indicators</p>	7.2.5
<b>The supply chain of handicrafts, handicrafts with strong potential, potential markets and directions for development</b>	
<p><b>Finding 9:</b> Supply chain of the handicrafts of northern Thailand</p> <ul style="list-style-type: none"> <li>o Three domains: supply, marketplace and demand and various stakeholders</li> <li>o Handicraft communities and SMEs – the core groups in the supply of handicrafts</li> <li>o Designers in the supply chain of handicrafts</li> </ul>	7.3.1
<p><b>Finding 10:</b> Handicrafts with strong potential for development for long-term viability</p> <ul style="list-style-type: none"> <li>o Three handicrafts with strong potential for development for long-term viability</li> <li>o Selecting one handicraft for in-depth study</li> </ul>	7.3.2
<p><b>Finding 11:</b> Potential markets for handicrafts and market components</p>	7.3.3
<p><b>Finding 12:</b> Directions for development of the handicrafts sector (replication, adaptation, innovation)</p>	7.3.4

# Chapter Eight

## Findings from the Case Studies

### 8.0 INTRODUCTION

---

This chapter presents findings from the three case studies in weaving communities and textile enterprises, which include:

- *Two in-depth case studies* in the weaving communities of the Tai Yuan ethnic group producing *chok* textiles and clothing in Long district (Phrae province) (Section 8.1) and Mae Chaem district (Chiang Mai province) (Section 8.2) – in northern Thailand;
- *A supplementary case study* with a brief investigation into a company running weaving courses and training in Bangkok – in the central region (Section 8.3).

### 8.1 CASE STUDY 1: WEAVING COMMUNITIES IN LONG DISTRICT (PHRAE PROVINCE)

---

A case study in the weaving communities of Long district was conducted in three sub-districts, including Hua Thung (main research site), Ban Pin and Huay O (for observations in a textile museum and textile shops). These involved 17 informants (including three group leaders, five weavers, three shop assistants/owners, four villagers, one buyer, one officer of a government department in the district) and a group of 20 trainees (who had come from another province for a weaving course and training in Hua Thung for one month). There were five key informants, whom the researcher followed up on for inquiries and interviews (including two group leaders, two weavers and one trainee).

Analysis of the information collected from Long district is presented as three main findings:

- Finding 1: Background of textiles in Long district (1950–2012);
- Finding 2: Current practices in textile products, production and sales;
- Finding 3: The main area for future development: weaving knowledge.

## 8.1.1 Finding 1: Background of textiles in Long district (1950–2012)

### 8.1.1.1 Development in textile production (1950–2012)

This was mentioned by 15 informants (including three group leaders, five weavers, one shop owner, four villagers, one buyer and one officer of a government department in the district). Development has taken place in three areas: (i) production techniques and processes, i.e. weaving, (ii) registration of business activities and (iii) markets.

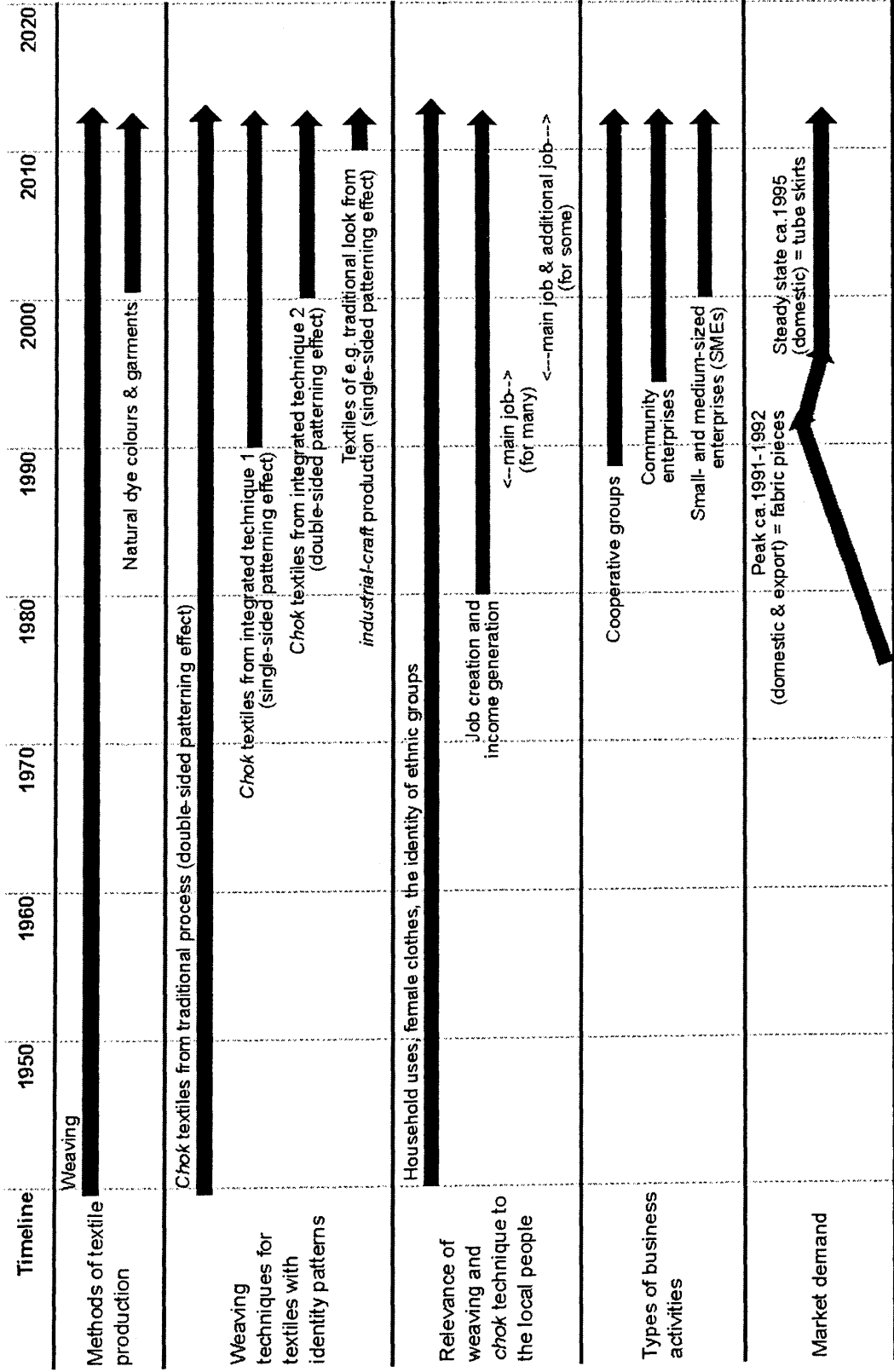
- i. **Production techniques and processes** for making textiles are based largely on *handloom* weaving and also involve *natural dye* production, relying mainly on human labour and traditional practices. Developments in traditional weaving for *chok* textiles lead to job creation and income generation.
- ii. **The registration of business activities** applicable to textile production includes cooperative groups, small- and micro-sized community enterprises (SMCEs) or community enterprises and small- and medium-sized enterprises (SMEs).

Community enterprise is seen as appropriate for local production management, while cooperative groups are regarded as a complicated and inflexible system. SMEs are not regarded as appropriate because businesses are usually dependent on buyers' preferences, with short timeframes for the production for large quantities of standardized products, which do not allow flexible working hours for local workers.

- iii. **Markets** for handwoven textiles and garments include domestic and export. The domestic market is identified as the main market and as appropriate for community enterprises, although there have been initiatives relating to export markets at times.

The timeline of developments and a brief explanation of the situation are presented in Tables 8.1–8.3.

Table 8.1 Timeline of developments in textile production in Long district (1950–2012)



**Table 8.2 Textile production in Long district, 1950–1990s**

Periods and main developments
<b><u>1950s</u></b>
<p><u>Existing situation:</u></p> <ul style="list-style-type: none"> <li>▪ <i>Chok</i> weaving was a traditional and integral part of the life of ethnic groups in Thailand.</li> <li>▪ After the Second World War, handicraft production faced a difficult time because of changes in social values and practices, e.g. machine-aided production, mechanical devices and factory goods. Several countries, including Thailand, tried to become more “civilized” or “developed” according to the western view of modernity. Traditional handmade items became less desirable.</li> </ul> <p><u>Consequences:</u></p> <ul style="list-style-type: none"> <li>▪ People wore <i>chok</i> textiles less often or not at all. <i>Chok</i> textiles were kept at home, or buried away in recognition of and with respect to the original makers, e.g. in a parish-day anniversary. <i>Chok</i> textiles faded away for a period of time. Nevertheless, <i>chok</i> weaving continued as a common practice among women.</li> </ul>
<b><u>1980–1990</u></b>
<p><u>Existing situation:</u></p> <ul style="list-style-type: none"> <li>▪ Only a few jobs were available in Long district. Weaving was common among women who produced textiles for household, daily and occasional uses.</li> <li>▪ In 1979, Queen Sirikit visited Ban Na Mon, a village in Hua Thung sub-district, with a vision for revitalizing and preserving traditional textiles and offer direction for weaving to generate income for people in rural areas.</li> </ul> <p><u>Consequences:</u></p> <ul style="list-style-type: none"> <li>▪ In 1989, a cooperative group for weaving and trading <i>chok</i> textiles was set up in Ban Na Mon village. The group was capable of weaving for the domestic and export markets. Its customers included Bang Sai Royal Folk Arts and Crafts Centre.</li> </ul>
<b><u>1990s</u></b>
<p><u>Existing situation:</u></p> <ul style="list-style-type: none"> <li>▪ Villagers were faced with poverty and wanted economic improvement. There was a demand for handwoven textiles which encouraged weavers to use their inherited skill and traditional practice of <i>chok</i> weaving for income generation. Compared to other weaving techniques, <i>chok</i> weaving was a most difficult and time-consuming practice. There was a need for development in traditional weaving to increase production capacity to meet market demand and to earn an income.</li> </ul> <p><u>Consequences:</u></p> <ul style="list-style-type: none"> <li>▪ <b>Development in the traditional weaving process for <i>chok</i> textiles</b> This was led by a group leader in Hua Thung sub-district. It integrated two weaving techniques: (i) discontinuous supplementary weft (<i>chok</i>) and (ii) supplementary weft or brocade (<i>yok dok</i>) and resulted in: <ul style="list-style-type: none"> <li>○ A <i>time reduction</i> in the weaving process which is estimated at 60%. (This still involved several steps in a preproduction process). This is based on information gathered about weaving a piece of <i>chok</i> textile, which comprised 70 repeated patterns. <ul style="list-style-type: none"> <li>○ With traditional weaving, a weaver can produce two repetitions per day (= 35 days per piece).</li> <li>○ With the integrated weaving process, a weaver is able to weave 10 repetitions per day (= seven days per piece). Mathematically, production time should be reduced by 80%. Realistically, it results in a reduction of 60% due to the fact that weavers were interrupted by other work and were not able to spend long periods on weaving; and</li> </ul> </li> <li>○ <i>Another quality of chok textiles</i> with single-sided patterning became available to the market in greater volume and at a lower price. (Traditional <i>chok</i> textiles have elaborate patterns on both sides).</li> </ul> </li> <li>▪ <b>Income generation and economic improvement</b> This was obvious among weavers employed in weaving <i>chok</i> textiles using the integrated technique in the district.</li> <li>▪ <b>Revitalization of the weaving and use of handwoven textiles and traditional clothing</b> <ul style="list-style-type: none"> <li>○ <i>Chok textiles became popular</i> among various groups of people as a result of improvements in traditional weaving that yielded increased quantities at affordable prices.</li> <li>○ <i>Garments in contemporary styles</i> were developed on the basis of modern clothing and the use of handwoven textiles (including <i>chok</i> textiles). These became popular, especially among higher social groups.</li> <li>○ <i>The traditional dress of ethnic groups</i>, specifically tube skirts and folk dresses, was replicated and shown through, e.g. local cultural performances.</li> </ul> </li> <li>▪ <b>Developments in patterning – from traditional to contemporary</b> While the traditional patterns of ethnic groups continued, contemporary patterns were developed based on traditional motifs.</li> </ul>

**Table 8.3 Textile production in Long district, 2000–2012**

**2000s**

Existing situation:

- Production of *chok* textiles was declining.
  - The cooperative group for weaving and trade in *chok* textiles in Ban Na Mon village (established in 1989) terminated due to a decline in sales (from 1995), management and funding issues and alternative jobs with better incomes. This group existed for about 10 years.
  - Community enterprises for textile production were set up in three villages. Their work included *chok* and basic weaving, natural dyes, garments, cotton plantations, agriculture and livestock. Later, the group in one village disbanded.

**2012**

Existing situation:

- The number of weavers is declining. There are about 20 weavers in two villages in Hua Thung sub-district. Many do basic weaving, and only a few work with *chok* weaving and are able to create contemporary patterns.
- Textiles from machine-based production, so-called “*chok* textile type”, become available in the market, especially in Bangkok.
- An industrial-craft method is developed which is largely based on the use of machinery but also involves manual activities to make textiles with traditional patterns. This is led by a group leader in Huai O sub-district in collaboration with a factory in Bangkok.

**8.1.1.2 The changing significance of weaving in relation to income generation**

During the 1990s, *chok* weaving was seen as a job for income generation among women in Long district. Yet its significance has changed over time as attested by 11 informants (including two group leaders, three weavers, two shop owners/assistants and four villagers). Three groups of attitudes towards the significance of weaving emerged, seeing it as (i) a main occupation that provides a viable income for women, (ii) an additional job for supplementary income or (iii) a job with a low wage which is not worth doing.

Reasons for **entering** handwoven textile businesses are (i) the popularity of *chok* textiles and OTOP projects and (ii) collections of *chok* textiles since the mother generation (ca. 20 years ago).

Reasons for **staying** in weaving communities and textile businesses are (i) to do weaving at basic or advanced levels as a part-time job for supplementary income or savings, (ii) resettlement in a village after marriage, (iii) family care (especially looking after parents or children), (iv) self-employment and flexibility in terms of workplace and time management and (v) the lack of an alternative job.

Reasons for **leaving** *chok* weaving are (i) health concerns (eyesight, head and body aches), (ii) the complicated and time-consuming process, (iii) low pay/underpayment,<sup>1</sup> the lack of a standard rate of employment and delays in payment (in some groups), (iv) the increased cost of production materials,<sup>2</sup> (v) the availability of alternative jobs<sup>3</sup> and (vi) lack of concentration and lack of ability (synchronization of eyes, brain and hands).

### 8.1.1.3 Feedback on development projects run by government departments/agents

Development projects run by the government departments/agents are to some extent affecting the development of weaving communities (this was mentioned by six informants, including two group leaders, two weavers, one villager and one officer of a government department in the district).

**Table 8.4 Feedback on government departments/agents – regarding development projects and common practices**

Development projects	Common practices
<ul style="list-style-type: none"> <li>▪ Often discontinued or interrupted</li> <li>▪ Respond mainly to economic and/or political requirements</li> <li>▪ Neglect local ways of living, local identity and local culture</li> <li>▪ Not based on true market mechanisms and the nature of handmade production, e.g. the aim for local handicrafts to export. The gap between production capacity and market distribution is significant, but was underestimated.</li> <li>▪ Rush to implementation without a plan</li> <li>▪ Lack a monitoring system for projects once they are completed</li> </ul>	<ul style="list-style-type: none"> <li>▪ Corruption, which becomes an issue accepted by many as part of the process</li> <li>▪ Imbalanced distribution of budgets to some districts or project areas, e.g. indigo-dyed fabrics, building construction</li> <li>▪ Changing role of social workers, from practical action to paperwork for project proposals and budget approval</li> </ul>

## 8.1.2 Finding 2: Current practices in textile products, production and sales

### 8.1.2.1 Products

Two main product categories were identified, including (i) clothing and accessories and (ii) fabric pieces/rolls. Examples of products that fall into these two categories are given in

<sup>1</sup> **Low pay and underpayment:** this relates to the complex and time-consuming process of weaving, which means that earning rates are very low in comparison to other jobs, especially for workers with low levels of skill. The income from weaving is not enough to cover their expenditure.

<sup>2</sup> **The cost of production materials** is increasing while wages remain the same.

<sup>3</sup> **Alternative jobs** in *Long district* include agriculture (main employment), product and service businesses (grocery shops, coffee shops, restaurants, saloons, tailoring, Internet and digital service shops, construction), company/organization representatives (NGOs, insurance companies, banks, local government services), general work for a daily wage. Jobs in *other provinces* include housemaid and babysitter, massage therapist, factory work, office work and labouring.



Table 8.6. These are usually made using cotton textiles. Clothing and accessories are developed in traditional, folk and contemporary styles. In relation to frequency of use, these products fall into regular and occasional uses. Textile products made with basic weaving techniques are usually for regular use (such as tube skirts, scarves, kitchen linen and pillows) whereas tube skirts that are decorated with *chok* textiles (*sin tin chok*) are meant for occasional use. *Sin tin chok* was identified (by group leaders, a weaver and a shop owner (n=4)), as frequently traded products. Prices vary, depending on production methods, techniques and materials.

**Table 8.5 Textile products of Long district**  
(Source: Site visits to the weaving communities in three sub-districts)

Clothing and accessories				Fabric pieces/rolls	
Clothes styles			Accessories	Basic weaving	Advanced weaving ( <i>chok</i> )
Traditional	Folk	Contemporary			
Tube skirts ▪ <i>Regular use</i> – made from plain textiles ▪ <i>Occasional use</i> – made with intricate patterns (i.e. <i>chok</i> textiles) ▪ <i>Newly-made</i> ▪ <i>Vintage</i>	Blouses Trousers Skirts	Pleated blouses	Bags Keyrings Wallets Pillows	Loincloths ( <i>sarongs</i> ) Scarves Kitchen linen Natural dyed fabrics Hand-spun cotton fabrics	Shawls Hem pieces made specifically for tube skirts Large pieces of textiles with unique patterns, made specifically for textile competitions
<b>Main material: cotton</b>					

### 8.1.2.2 Production

The textile production of Long district can be explained in terms of:

- A. Production management;
- B. Production processes;
- C. *Chok* textiles produced by differing weaving processes;
- D. Pattern development in production;
- E. Other issues.

## A. Production management

Community enterprises are a form of business organisation commonly used for textile production in Long district. Group leaders are responsible for production management, including investment in raw materials and tools, product design and development (including pattern development), research and development, job allocation to workers and collecting products for sale. Their role can vary between producer/buyer and buyer/trader. Their mindset with regard to business operation was revealed from two group leaders.

**Table 8.6 Mindset in business operation**

People management	Knowledge and business development
<ul style="list-style-type: none"> <li>○ Assessing workers' abilities and allocating jobs according to skill levels</li> <li>○ Ensuring skill development and skill retention – through regular practice</li> <li>○ Establishing a hierarchical structure<sup>4</sup> for group control based on respect and trust</li> <li>○ Encouraging participation in the workforce by both genders. (A few young male weavers,<sup>5</sup> with high level of skill, were found.)</li> <li>○ Loving in the doing (It's about passion, more than just an occupation.)</li> <li>○ Being honest with customers</li> </ul>	<ul style="list-style-type: none"> <li>○ Acquiring historical knowledge with respect to their locality, ethnicity, entity and identity</li> <li>○ Seeking developments in a certain direction as well as market opportunities and potential customers including their feedback for further development</li> <li>○ Having a development direction, such as for commercial benefit, or for the preservation of traditional culture or for the combination of both</li> </ul>

**The production network** includes artisans within the same province and sometimes in other provinces and regions. The artisans are keen to do a particular job in which they are skilful. They usually work at home, although some come to work in the studios or shops of group leaders.

**Employment types** include work paid per (i) day, (ii) piece and (iii) month; the group leaders may offer different types and rates of employment (this was explained by 10 informants,

<sup>4</sup> **The hierarchical structure** of a group is clearly evident, especially when visitors come to enquire about textile production in the weaving communities. Group leaders should be acknowledged and are responsible for introducing visitors as if it is appropriate for them to meet the workers. Once they have been introduced, neither party should exclude the group leader for their own benefit, e.g. to gain a new order for textiles. It is a matter of respect, trust and control over the workers and products which they produce.

<sup>5</sup> **Young male weavers** aged between 30 and 35 years were found. One of them lives in a village near Long district. Another lives in another province (Chiang Mai), and came to Long district as a buyer of vintage textiles.

including two group leaders, five weavers, one shop owner, one shop assistant and one buyer). Examples of employment types are shown below.

**Table 8.7 Examples of employment types in textile production in Long district**

Work type	Practice	Group 1	Group 2
Per day	Artisans, e.g. those with basic skills for general work or high skills for a unique piece of handwoven textile, come to work in the shops or studios of group leaders.	(Maybe)	√
Per piece	Artisans work at home and then deliver the finished items to group leaders. Wages vary, depending on skill levels and production techniques.	√	√
Monthly salary	Artisans, e.g. those with basic skills for general work, come for work in the shops of group leaders.	√	(Maybe)

## B. Production processes

These can be broadly described in terms of skill types, production processes and materials.

**Skill types** include weaving, applying natural dyes, sewing and tailoring. Villagers in several districts are capable of doing these. **Production processes** are largely based on human labour and skills. However, recently there has been a movement towards machine-based production (industrial-craft) for some products such as tube skirts, pleated blouses and printed cotton bags. Nevertheless, skilled workers are required for some stages of the production process. The material used is often **cotton**, including both hand-spun and factory cotton. Hand-spun cotton threads can be sourced locally, for example in Long and Wang Chin districts. Factory cotton threads and fabric rolls are sourced from suppliers in city markets, such as Phrae, Chiang Mai or Bangkok. Silk can be sourced for special orders, e.g. for textile competitions. However, silk is not commonly used.

**Table 8.8 Production processes**

Skill type	Production processes		Material	
	Manual	Machine-based	Cotton	Silk
Weaving	√	√	√	Occasional
Natural dyeing	√		√	
Sewing and tailoring	√		√	

### C. *Chok* textiles from differing weaving processes

As mentioned in Table 8.2, there was a need for developments in the traditional process for weaving *chok* textiles to ensure the economic viability of the weaving communities and the revitalization of *chok* textiles. These developments have taken place over time. This research identified four differing processes for producing *chok* textiles, as explained below.

#### Handmade production

- *Chok* textiles made using the traditional process (inherited from a long time ago)
  - The handloom is equipped with two heddles to separate warp threads for the passage of the weft. Each motif in the pattern is handpicked. Patterns are visible in fine quality on *both sides* of the fabric.

**Figure 8.1 Handloom and *chok* textiles made using the traditional process**  
(Source: Mae Chaem district)





- *Chok textiles made using integrated<sup>6</sup> techniques (developed in the 1990s)* – The handloom is equipped with the master patterns that are set with several heddles to help raise warp threads for passage of the weft. A weaver can simply pass weft threads across through the handloom for patterning. Patterns are visible in fine quality only on *one side* of the fabric.

**Figure 8.2 Handloom and *chok* textiles made using integrated-techniques**  
(Source: Long district)



### Machine-based production

- *Chok textiles made using industrial-craft production (developed in the 2010s)* – A brocade technique is employed in production. The patterns are revealed in fine quality only on *one side* of the fabric. Two broad types of pattern are revealed, some that replicate traditional motifs, and others that are inspired by the underlying meaning of traditional motifs, yet designed to look totally different from the original. Areas that need craftsmanship in this process include the creation of a master set of patterns, and finishing which involves embroidery, for example.

<sup>6</sup> **Integrated:** between discontinuous supplementary weft (*chok*) and supplementary weft or brocade (*yok dok*).



Figure 8.3 *Chok* textiles made using industrial-craft production



#### D. Pattern development in production

The idea of designing “new” textile patterns is viewed with different degrees of rejection/acceptance by group leaders. The argument was that a number of patterns are already available in Long district, so there is no point in creating “new” ones, or that “new” patterns are acceptable if they are based on traditional patterns.

The development of patterns is based on a “mix-and-match” technique, using the experienced weavers of Hua Thung sub-district. This means mixing or matching traditional motifs that are known and familiar to the weavers. They imagine ways in which motifs could be mixed. A concept is then developed by hand, by the person who had the idea working alone or in collaboration with experienced weavers. The use of computer software for designing patterns is seen as an area in which this weaving community lacks ability.

#### E. Other issues discussed

**Strengths and weaknesses** in textile production at the community level were revealed. Strengths include the high level of skill of the craftspeople. Weaknesses are the quality of materials and production standards – for example, the use of cotton threads with varying specifications, or the poor quality of dye colours.

**The value of *chok* textiles** in relation to their production processes was discussed. There are two broad types of *chok* textiles, i.e. “newly-made” and “vintage” textiles.

- *Newly-made textiles* can be produced using any of the four processes mentioned above. In the market, *chok* textiles made using the traditional process are usually set at a higher price than those made using the integrated techniques, while those made by industrial-craft (machine-based) production are set at a lower rate. In terms of handmade production, *chok* textiles made using integrated techniques are available in greater quantities than those made using the traditional process, and are set at a pricing affordable by the general public.
- *Vintage textiles*<sup>7</sup> are available in limited numbers. Because of the rarity, these textiles are sold at a very high price, which only a few can afford. From the perspective of fabric collectors, newly-made textiles are incompatible with vintage textiles in many ways, not only in terms of monetary value. Textile collectors assess the value of vintage textiles based on their rarity,<sup>8</sup> the materials used and weaving techniques. Additionally, vintage textiles are considered in terms of a valuable source of knowledge, including weaving techniques, material culture, costume design and pattern design, imagination and cognitive process, identity of the individuals and groups, beliefs, ways of living and many more.

Developments in the traditional process of *chok* weaving, have made positive **contributions** in many ways. For example, through training in weaving and textile production, villagers/weavers are offered opportunities to gain knowledge and skill and to be employed in textile production and earn an income. Having worked in the communities, weavers gain personal value through being accepted/acknowledged within their groups and beyond. This community environment helps to strengthen their belief and pride in and the continuance of the weaving tradition. Ethnic textiles are revitalized. More importantly, the weaving tradition

---

<sup>7</sup> **Vintage fabrics** are those made a long time ago (e.g. 30 years ago, or a lot older). Prices may range from 10,000 to 100,000 baht (US\$312.50–3,125.00) per piece, or much more (exchange rate as of 2012, equivalent to: 32 baht per dollar (Bank of Thailand, 2015)).

<sup>8</sup> **Rare items** are vintage fabrics produced in limited numbers or difficult to find elsewhere, e.g. due to the termination of production in specific localities, or the deaths of weavers.

and ethnic textiles of Thailand contribute to the country's cultural heritage (traditional culture) and (ethnic) identity.

*Chok* textiles made using different weaving processes are available **in the market**, yet the differences in quality and value are understated. Generally, customers are not aware of and cannot differentiate between the different qualities and values of *chok* textiles. It is said that some sellers mix textiles made by machine-based processes with the handmade ones and sell them in the same price range. They take advantage of disparity in costs of the differing weaving processes and the lack of awareness of the quality and value of handwoven textiles to increase their profits. This does indeed create confusion, doubt and lack of trust among buyers, for example, about whether textile products are really handmade or made by machine-based processes, and whether they are overpriced. The group leaders therefore suggested that handmade textiles should have a unique identity which distinguishes them from those made using machines. This could be, for example, an identity relating to their local history and cultural heritage, such as the use of particular products, materials, forms and proportions, patterns and colours.

**An issue relating to registration of geographical indication (GI)**<sup>9</sup> emerged during discussions with the group leaders. The *chok* weaving of Mae Chaem district is already registered<sup>10</sup> for GI, while that of Long district was not (in 2012). The group leaders of both districts understood the significance of GI, as it would involve the documentation of local practices and products, help to promote local identity in trade, and contribute to protecting the intellectual property of local communities. The group leaders in Long district believe that the *chok* textiles of Long district have unique features, yet a deeper investigation is needed to determine whether these meet the GI criteria.

---

<sup>9</sup> **Geographical Indication (GI)** is the name or symbol indicating the origin of goods with special qualities or features derived from a locality, including geography/nature and human factors, e.g. "Petchabun Sweet Tamarind". "The right [to] geographical indication thus belongs to the local community or the local people which produces the good[s]" (Department of Intellectual Property, 2010). The World Intellectual Property Organization (WIPO) initiated GI for rights protection.

<sup>10</sup> **Registration for GI** is managed by the Department of Intellectual Property, Ministry of Commerce, Thailand.



The ASEAN<sup>11</sup> economic community (AEC) is a subject that producers should be aware of and find information about in order to be prepared for its implementation by 2015.

*“The ASEAN Economic Community (AEC) shall be the goal of regional economic integration by 2015. AEC envisages the following key characteristics: (a) a single market and production base, (b) a highly competitive economic region, (c) a region of equitable economic development, and (d) a region fully integrated into the global economy.” (Association of Southeast Asian Nations Secretariat, 2014b)*

Textile producers identified several areas for improvement to ensure competitive production, including skills training in weaving (to ensure an increasing number of skilled workers) as well as languages (i.e. English and Chinese), ensuring labour costs are competitive, using raw materials which are grown locally (e.g. cotton)<sup>12</sup> and creating/encouraging/ensuring market environment which moves away from those offering copycat products and undercuts prices.

### 8.1.2.3 Sales

The domestic market is the main area for trade in handwoven textiles. The main group of customers is local Thais who are older than 35/40 years. Some customers are regular, while others are not. Regular customers are, for example, shop owners in other districts/provinces, directors of government departments and wedding couples. Irregular customers are such as tourists, project officers, people in Phrae province and visitors to trade fairs. They purchase finished products and/or place orders for newly-made items for personal use (as buyer/user) and/or for trade (as buyer/trader). The purchasing decision is often based on trust and the reputation of the group leaders of textile communities. Their products are distributed both through retail shops and temporary outlets such as booths at trade fairs or exhibitions.

One group leader addressed a need for market expansion targeting the younger generation and foreigners. Having more customers could bring more jobs and employment to localities. Yet customer gaps were identified:

---

<sup>11</sup> **ASEAN:** Association of Southeast Asian Nations.

<sup>12</sup> **Cotton:** Over the past 10 years, the factories for cotton thread in Thailand have declined in number. Some factories import cotton thread, e.g. from the USA and Myanmar (Burma), for trade.

- *For young customers*, there are gaps in product styles and prices. Customers often say that products are old-fashioned, and all have the same [in fact similar] patterns in vivid colours, which are difficult to match with other clothes. Also, products are expensive.
- *In terms of foreign customers*, the group leader means “the market for foreigners and not necessarily the export market”, although was concerned about the ability to communicate in other languages (i.e. English and Chinese), the trade system and ways to deal with such customers.

There is a need for development in **sales and promotional materials**. The group leader mentioned preferences for and the rejection of some materials.

- *A website, product list and price list* are the preferred elements which could help inform wider groups of customers about the textile products on sale.
- *Catalogues with textile swatches/samples* are not preferred. These can create the expectation that what is purchased will have “exactly” the same features as those seen in the catalogues. Handmade products are, by nature, limited by human capability and usually offer unique or “similar” features, but not “identical” characteristics.

There is an issue about offering a fair/satisfactory **rate of payment** in relation to **product pricing**. This issue has to do with whether (i) producers/traders offer a fair rate of employment to makers, (ii) weavers/artisans are satisfied with their remuneration in exchange for their labour and (iii) whether the products are overpriced (especially if the makers receive an unfairly low rate of payment). In response, the group leader pointed out that people usually think of handwoven textiles as involving only weaving. In fact, there are several steps involved in textile production, including materials preparation (e.g. of threads and natural dyes), the creation of a master set for patterning, and then weaving, sewing and finishing the products, and packing and distributing products. Additionally, there are other operational costs involved in running a business, such as pattern design and product development, market research, and material investment and risk management. All these elements are taken into consideration in product pricing.

### 8.1.3 Finding 3: The main area for future development: weaving knowledge

Six informants (two group leaders, two weavers, one trainee and one buyer) addressed knowledge transfer and information management in weaving and ethnic textiles (including *chok* textiles) as a main area for development to ensure the long-term viability of the weaving communities.

#### 8.1.3.1 Problem identification

- There is a need for **the transfer of knowledge** in traditional weaving from experienced weavers, many of whom are aging, to the younger generation to prevent the loss of this knowledge in the near future (ca. 20–30 years). Weaving knowledge is practice-based and embedded largely within the weavers themselves. It takes time for someone to become proficient and knowledgeable in weaving. Therefore, it is critical to develop methods and materials for weaving training which are appropriate for the younger generation and can ensure the transfer of the knowledge and skills in the time given.
- There is **erosion in knowledge** about ethnic textiles (including *chok* textiles) among the weavers of Long district, including in-depth understanding of the “identity” and “meaning” of *chok* textiles.

A long time ago, Tai Yuan weavers developed *chok* textiles with different characteristics or patterns, to “distinguish themselves from others, including Tai Yuan from other regions [and provinces]” (McIntosh, 2012, p.3) such as Chiang Mai, Saraburi or Sukhothai. Recently, the weavers in Long district have become accustomed to employing integrated techniques that offer a greater production capacity in response to market demand. Buyers/traders from other provinces (e.g. Sukhothai) also place orders with the producers in Long district for newly-made *chok* textiles with a Sukhothai identity, and so the weavers of Long district have become “supply weavers”. Some are unaware of or confused about the characteristics of *chok* textiles of Long district and cannot distinguish them from those of other districts/provinces. Generally, the weavers know only that they are making *chok* textiles made in Long district.

Some weavers lack in-depth knowledge about the names and meanings of the many *chok* textile patterns, and often see only two types of pattern, i.e. “traditional” and “new”. A set of patterns comprises several motifs, arranged as main and supplementary compositions, and these have names and convey meaning. Yet some weavers cannot articulate the names (and hence the meanings) of the various motifs unless they check in books.

**Figure 8.4 Patterns in *chok* textiles from Long district**  
(seen from the outside and inside of a tube skirt)



- There are **few books about traditional weaving** (i.e. techniques and processes) **and ethnic textiles** due to gaps in the sources of textile knowledge.

*Collecting information* about traditional weaving and ethnic textiles requires specialists (such as collectors of vintage fabrics, conservationists, scholars, weavers and group leaders), with knowledge in the different areas of handwoven textiles (such as textile history, textile theories, textile production and weaving techniques and processes). They usually provide information about these *orally*. Generally, they can be seen in two groups: practitioners and theorists.

*Producing books* about traditional weaving requires someone who has an understanding of textile theories and the practical aspects of traditional weaving, as well as an ability to write well and so on. It is rare for someone to have these abilities as well as a strong interest in writing books. *Weavers*, who have the practical knowledge, are always busy with handwork in the field and do not usually spend time writing after work. They have limited time for external parties such as research groups. In addition, they may not be proficient writers. In contrast, *scholars* such as university teachers or researchers have the theoretical knowledge as well as writing ability, but usually lack practical experience. Moreover, only a few are interested in the techniques and processes of traditional weaving.

- There is a **lack of interest among villagers/weavers in going to museums**, displaying vintage textiles. They point out, for example that some museums are open only to particular visitors, have irregular opening hours, prohibit photography and do not have guides about the textiles on display.

#### **8.1.3.2 Mechanisms for transferring knowledge in weaving and providing information about ethnic textiles**

These were recommended by six informants, including two group leaders, two weavers, one weaving trainee and one buyer.

**Table 8.9 Mechanisms identified as being relevant for transferring knowledge in traditional weaving and providing information about ethnic textiles**

Domain	Stakeholder interaction	Mechanism	Recommendation
Intragroup	Interaction between weavers/artisans and producers for textile production	Books	Books about textile patterns and weaving techniques that provide both textual and photographic information. (Weavers prefer not to use digital tools, such as CDs and computer files).
		Information systems	Information systems that collect and manage information about ethnic textiles from various localities, especially the patterns that differentiate the various ethnic groups. Such a system could also facilitate a sales system in the future.  This would need teamwork with different expertise, including computer skills.
Intergroup	Interaction between experienced weavers, weaving trainees, buyers, users and people interested in weaving and ethnic textiles	Weaving courses and training	See Section 8.1.3.3
		Knowledge centres	Textile shops and galleries, coffee shops and textile galleries
		Events	Textile fashion shows, textile exhibitions and weaving demonstrations, traditional ceremonies (e.g. weddings) – at a local level
		Websites and social media	Websites and social media as a channel for local producers to: <ul style="list-style-type: none"> <li>• Connect with customers further afield, e.g. foreigners;</li> <li>• Promote their community enterprises and products.</li> </ul> (Weavers need to work on information management relating to various types of textiles).

Of these, “weaving courses and training” were emphasized as highly effective mechanisms that could: connect weavers with various groups of stakeholders, minimize knowledge gaps, and promote the weaving communities.

### 8.1.3.3 Discussions and recommendations specific to weaving courses and training

The group leader of a weaving community in Hua Thung sub-district discussed training courses currently available as well as the demand for training as follows.

**Training courses** which are currently available include:

- *Weaving courses* – vary according to skill levels, including: basic weaving (10 days), advanced weaving, specific to the *chok* technique (20 days) and making a piece of *chok* fabric (180 cm in length and 14 inches in width) (30 days);
- *Natural-dyes courses* – include hot-water processing (two days) and cold-water processing (three days).

**The demand** for training (e.g. for college/university teachers and students) in natural dyes is higher than that for weaving. The demand for weaving courses in *chok* textiles is less among the villagers and in the local schools of Long district, but buyers/shop-owners in Bangkok enquired about these for children, and about weaving demonstrations in their shops.

**An observation on a weaving course** specific to *chok* textiles was taken place over one month, involving three weavers/instructors and a group of 20 trainees (comprising two schoolteachers and 18 students) who had no background in weaving. The observation was conducted prior to, during, and towards the end of the course. Afterwards, discussions were conducted with six informants (including two group leaders, two weavers and two trainees) to elicit recommendations, which are as follows. Overall, this weaving community needs to further develop course structures, training materials and course fees.

- The recommended ratio between weavers/instructors and students is 1:10, 2:20 or 3:20, depending on the trainees' background in weaving.
- Two directions are possible for *chok* weaving courses. They could cover *the entire processes* of textile production, including preparation for hand-spun cotton and weaving threads, the creation of a master set of patterns, weaving and sewing/tailoring/finishing. Alternatively, they could address *merely the particular process(es)* in textile production for which they need to increase the number of skilled workers or upgrade their skills, such as the creation of a master set of patterns, or which potential customers are particularly interested in.
- Besides training in weaving specific to *chok* textiles, the courses could offer other activities such as product design and development for market research or making weaving tools locally with natural materials, e.g. bamboo and wood.

- The identification of skills and skill levels is crucial for traditional weaving, which is a complicated system and requires collaboration from a number of workforces. This may be determined on the basis of trainees' participation and productivity in a weaving workshop in which they spend time on several different activities.
- Weaving courses, handlooms and tools could be developed to make learners feel at ease to begin with and see results in a short time to motivate them to continue at a higher level. An example was given of a company running weaving courses and training in Bangkok. Full details of this case study are reported in Section 8.3.
- Teaching materials that could assist students to learn weaving effectively include sample fabrics with patterns demonstrating skill levels from basic to advanced, and graph books for plotting patterns. Also, instruction sheets and mini-handlooms may be useful for basic weaving that involves counting threads and patterning.

## **8.2 CASE STUDY 2: WEAVING COMMUNITY IN MAE CHAEM DISTRICT (CHIANG MAI PROVINCE)**

---

Field research was conducted in Mae Chaem district and specifically in two sub-districts: Tha Pha and Chang Khoeng. Three research findings are identified, relating to:

- Finding 1: Development projects in the weaving communities;
- Finding 2: The way of life of the people in Mae Chaem district;
- Finding 3: The community enterprises for textiles and garments.

These findings are drawn from the information collected from 24 informants (including seven group leaders, 10 weavers, one shop owner, three villagers, two visitors/buyers and one buyer). Among them there were five key informants (including one group leader, three weavers and one buyer).

### **8.2.1 Finding 1: Development projects in the weaving communities**

Development projects in the weaving communities of Mae Chaem district was mentioned as beginning in the 1990s due to poverty, debt and other social issues. A development project



was initiated based on the skills and practices which the villagers already had. Weaving was identified as an area with potential for improving the livelihoods of artisans. Other development projects have been implemented and reported on up to 2012.

#### **8.2.1.1 Contextual factors in the 1990s**

At that time, there were changes in society as a result of (i) a government policy for Thailand to become an industrialized country, (ii) the importation of technology and advanced equipment from abroad and (iii) the big flood of 1991, which affected Thailand. Social norms changed, especially from traditional agriculture that was based on human labour and simple tools, to modern agriculture using tractors, mechanical tools as well as chemical insecticides. People started to aspire to a modern society with a convenient lifestyle that they engaged with products of advanced technologies such as televisions, rice cookers, lamps and torches. Many applied for loans from finance agents outside the banking system in order to have enough money to buy such products. Their interest rates were extremely high, and left the villagers with large debts. Coincidentally, there was the big flood in 1991 that damaged agricultural crops resulted in their decreased prices in the marketplace for several years thereafter. Many people became addicted to drugs and gambling out of stress, debts and poverty.

Socio-economic factors were targeted as an area for development. This raised the question of what could be done to create a healthy society and improve the livelihoods of villagers. Weaving, a traditional practice among women, was identified by government officers as an area with potential for income generation.

#### **8.2.1.2 Feedback on development projects**

Over time, several development projects were implemented and refined in weaving communities. Development projects involved several parties, such as government agencies, academic institutions, scholars, schoolteachers, community developers and journalists. Most development projects had the same broad aim of revitalizing and preserving traditional weaving and ethnic textiles in ways that offer commercial activities and economic viability at a local level. Likewise, a buyer/trader suggested that in parallel with this direction, other

directions could be developed to connect handwoven textiles with various stakeholders, especially the younger generation, both in Thailand and abroad.

The development projects currently led by a non-governmental group are regarded by weavers and villagers as compatible with to their way of life, supporting their livelihood and strengthening the weaving communities. Several of these projects of this group have been continued. These are discussed in Section 8.2.1.3, below.

Other development projects mentioned are government initiatives and academic research. Seven informants (including three group leaders, two weavers, one shop owner and one buyer) provided feedback as follows.

**Table 8.10 Feedback on development projects led by government departments/agents**

<b>One Tambon [district] One Product (OTOP) projects</b>	<b>Other projects</b>
<p><i>Positive feedback</i></p> <ul style="list-style-type: none"> <li>▪ The classification of product standards into five levels (five stars) is useful for sourcing suppliers. The OTOP projects provide an information system which helps to connect producers with buyers at a local level.</li> </ul> <p><i>Negative feedback</i></p> <ul style="list-style-type: none"> <li>▪ OTOP projects and the project criteria do not relate to the ways of life of the people in Mae Chaem district, and so villagers do not pay much attention to them. Weavers continue with weaving as a hobby and tradition instead of meeting the criteria.</li> <li>▪ The classification of product standards into five levels creates disunity among producers in the district.</li> </ul>	<p>Development projects are usually:</p> <ul style="list-style-type: none"> <li>▪ Discontinued;</li> <li>▪ Interrupted;</li> <li>▪ Slow in implementation;</li> <li>▪ Irrelevant to local ways of life;</li> <li>▪ Not beneficial to local people.</li> </ul>

### **8.2.1.3 Development projects led by a non-governmental group**

This group has been working on development projects specific to weaving communities for *chok* textiles in Mae Chaem district for more than 20 years (since ca.1990). The projects focus on the revitalization and preservation of traditional weaving and the commercialization

of textile products. The leader of this group explained that these projects were divided into two main phases:

- Phase 1: Weaving and product development (ca.1990–1995);
- Phase 2: Weaving and cultural revitalization (ca.1996–present).

**Table 8.11 Development projects led by a non-governmental group  
– towards *product development***

**Phase 1: Weaving and product development**

**Period:** ca.1990–1995 (5 years)

**Problems at the district level:** Poverty and social issues

**Aim:** To improve the livelihoods of villagers and create a healthy society

**Direction:** Product development driven by on-site problems such as the creation of weaving patterns developed due to a problem arising from broken beams.

**Current mindset:** Development is based on the ability and essence of individuals.  
("We start from where they are. We do not rely on the customer's value.")

**Strategy:** *Chok* weaving and textile products for value creation, commercialisation and income generation

**Project activities:**

A. **Field study** for the identification of problems in weaving

The process of traditional weaving was complicated, labour-intensive and time-consuming. It might not be feasible to focus only on *chok* weaving for the livelihood of villagers.

B. **Classification of skill levels**, i.e. of weavers and other interested groups

- i. Weavers with basic skills for plain weaving
- ii. Master weavers who prefer to continue with traditional weaving
- iii. Amateurs with interest but no weaving skills

C. **Job allocation**, to weavers (i–ii) and amateurs (iii)

D. **Skills training** for amateurs with no weaving skills (iii), followed by job allocation.

**Results:**

- Income generation
- Human and community development
- Continuation of traditional weaving

**Troubleshooting:**

- A focus on traditional weaving and *product development* for trade was not seen as a long-term direction. Textile products made with traditional methods did not satisfy changing lifestyles and did not sell very well in markets, as there were alternative products available in markets, especially mass-produced goods from factories. Many weavers left weaving to take other jobs with a more lucrative income.
- This led to a question, which was answered suggesting another direction for development:

**Q:** Why did people engage in *chok* weaving for hundreds of years?

**A:** It was about the way of life in the localities, involving cultural heritage, personal pride, traditions, objects and values.

**Table 8.12 Development projects led by a non-governmental group  
– towards cultural revitalization**

**Phase 2: Weaving and cultural revitalization**

**Period:** ca.1996 to the present (as of 2012)

**Problems at the district level:** Poverty, social and cultural issues

**Aim:** For development that could ensure long-term economic viability of the weaving communities and strengthen their local traditions

**Direction:** Cultural revitalization

**Mindset:** Development based on local ways of living

**Strategy and project activities:**

- *Initial step (ca.1996–2000)*

Development projects were focused on revitalizing local traditions and traditional work (e.g. the repair of antique objects) and creating platforms that enable the dissemination of traditional work and generate income. Development projects included various activities, e.g. product development, sales and marketing, demonstrations of cultural traditions, such as weaving demonstration by 10 weavers at exhibitions and trade fairs in Bangkok. These resulted in knowledge exchange between local artisans and buyers.

- *Second step (ca.2001 to the present)*

Development projects were focused on revitalizing traditional culture in ways that relate to local ways of life in the localities, including:

- i. Weaving courses in schools in Mae Chaem district and/or in schools/universities beyond the district;
- ii. A weaving school established in the city of Chiang Mai that offers courses for weaving training and knowledge transfer between experienced weavers and the younger generation;
- iii. Revitalization of a weaving tradition through the dimension of religious practice, i.e. *Junlakathin*<sup>13</sup> religious ceremonies;
- iv. Local knowledge centres specific to traditional weaving and ethnic textiles, for example in the form of a local library.

**Results:**

- Income generation
- Human and community development
- Continuation of traditional weaving and revitalization of traditional culture

**Troubleshooting for future development:**

Cultural revitalization is suggested as a long-term direction for society, offering socio-economic and socio-cultural developments. However, challenges are identified.

- Only a few number of the **younger generation** (20s) are found in the weaving communities. It is crucial to get the younger generation involved to ensure the continuation of weaving as part of the cultural heritage of Thailand. What would be appropriate platforms for **knowledge transfer** between experienced weavers and the younger generations in the long term? And how to create them?
- Teaching for **creativity** or **design thinking** is needed at the local level. To some extent, the registration<sup>14</sup> of 16 traditional patterns for *chok* textiles has created a belief in a standard way of doing things. In fact, traditional motifs could be applied or redesigned for textiles in other styles.
- Weaving is fundamentally excluded from academic degree courses. A **weaving course** by itself is unlikely to be financially feasible in the long term. It needs contributors.

<sup>13</sup> *Junlakathin*, a religious ceremony which is held once a year in November. Organizing these events requires collaboration from a number of people, to make objects, set up the event, provide financial contributions and so on. Textiles are required for the ceremonial acts, such as monk's robes and holy threads and flags.

<sup>14</sup> **Registration** for a geographical indication (GI).

## 8.2.2 Finding 2: The way of life of the people in Mae Chaem district

This can be broadly explained in terms of their principles of life and occupations:

### 8.2.2.1 Principles of life

These were mentioned by eight informants, including two group leaders, two weavers, two villagers, one shop owner and one buyer. Their principles of life relate to family, ethnicity, tradition and religious beliefs (Buddhism).

**Mae Chaem people are characterised as valuing:**

- A slow and simple life;
- Happiness and peace;
- Ease and comfort, with a preference for familiar things;
- A sufficient way of live;
- Natural materials as material culture – based on the efficient use of natural resources;
- Mutual dependency among villagers – a “brother and sister” relationship;
- The essence of the person and the ethnic group;
- Traditional practices;
- Pride – in the people, traditional practices, and in local art and culture.

Weaving is an example which exhibits these characteristic values. (This is explained further in Section 8.2.2.3).

**Family** is an important aspect of one’s life (this was mentioned by five informants, including two group leaders and three weavers). The people in a village are primarily part of extended families. This creates a “brother and sister” relationship in which people are dependent on village groups for collaboration and contributions.

- **A family comprises three to four generations**, including great-grandparents, grandparents, parents and children. In some families, the great-grandparents

have already passed away. The purposes in life vary, driven by periods of life and basic needs, such as education, occupation, marriage and retirement. The purposes in life vary, driven by periods of life and basic needs, such as education, occupation, marriage and retirement – and these relate to decisions about which location to live in. Analysis of age groups in relation to life purposes and location to live in are summarised below.

**Table 8.13 Age groups, their purpose in life and location to live in**

Age Group and Factor Involved				
Age	Definition	Purpose of Life	Designate Area	
			In Mae Chaem district	Outside Mae Chaem district
01-06	Children	Being raised up at home	CONVENTIONAL	
07-12	Children	Primary education	CONVENTIONAL	SOME
13-15	Teenagers	Secondary education (junior level)	CONVENTIONAL	SOME
16-18	Teenagers	Secondary education (senior level)	COMMON	SOME
		Work	SOME	SOME*1
19-22	Teenagers, young adults	Higher education		SOME*2
		Getting married	SOME	
22-35	Young adults, adults	Work for income	SOME	SOME*1
		Getting married	SOME	SOME*1

**Remark:**

\*1 Some people work in factories (i.e. Lamphun Industrial Estate), department stores/supermarkets in Chiang Mai or Lamphun provinces

\*2 Some people study in the colleges/universities in Chiang Mai.

Designate Area	Age Group and Density of the Group in the Area					
	(01-06)	(7-12)	(13-15)	(16-18)	(19-22)	(22-35)
Inside Mae Chaem district						
Outside Mae Chaem district						

- **Many of those living in the district are elders**, i.e. people above middle-age, as well as children and babies. A large number of teenagers and young adults relocate to neighbouring districts (i.e. the centre of Chiang Mai) and other provinces (i.e. Lamphun) for study and work. A few of them go further, to Bangkok. Some young parents leave their children to be raised by grandparents in the district.
- **Families play multiple roles in supporting family members**, including moving to a city for the education of their children, entering another job market to earn sufficient income to raise their family, passing on practice-based knowledge (especially in agriculture and handicrafts), and looking after babies and children while parents are at work.

### 8.2.2.2 Local occupations

Nine occupations and two types of income were identified among 15 informants (including five group leaders, six weavers, one shop owner and three villagers). There are the main and the supplementary income. All nine occupations can fall into either category or both. For someone to make a decision about their occupation, other factors are taken into consideration, such as working conditions (especially the location of the workplace and working hours), needs and willingness to support family members (e.g. looking after aging parents/grandparents), and the cultural heritage of the district. The nine occupations are:

- Accommodation for tourism, such as small resorts, homestays, saunas;
- Agriculture and livestock;
- Catering, for example in a bistro, restaurant or homestay, or for seminars and training;
- General work;
- Looking after babies/children and/or aging parents/grandparents (mentioned as an additional duty, yet high significant);
- Office work, such as in a school or district administration office;
- Trade, e.g. in handwoven textiles and clothing, or fruit and vegetables;
- Weaving and handicrafts (often cited as a hobby, yet significant in terms of the cultural heritage of the district);
- Work to support traditional religious ceremonies (mentioned as a hobby, yet important to the community for support and solidarity and in spiritual terms).

**Agriculture** and livestock were mentioned by seven informants (including two group leaders, two weavers, one shop owner and two villagers) as the main occupation. The average daily wage (as of 2012) in agriculture was 250 baht<sup>15</sup> (US\$7.8) for women and 300 baht (US\$9.4) for men. The villagers have been involved in agriculture for generations.

---

<sup>15</sup> **Baht:** Exchange rate as of 2012, equivalent to: 32 baht per dollar (Bank of Thailand, 2015).

**Handicrafts** relate to agriculture in that artisans use agricultural materials for making handicrafts. This was mentioned by 10 informants (including three group leaders, four weavers, one shop owner and two villagers). Villagers usually spend their free time doing handicrafts. This has become a tradition and villagers are proud of their folk crafts.

There are several groups of artisans making handicrafts in Mae Chaem district, including wickerwork and basketry making, handloom weaving, carpentry and making hairpins in smithies. Some handicrafts production is gender-specific. For example, wickerwork is mostly done by men, but the number of wickerworkers are declining; they tend to work individually and have a loose relationship to the group. On the other hand, weavers are mostly female; and weaving is reported to be thriving, with a healthy relationship among weavers and artisans.

**Chok weaving** was mentioned by eight informants (including three group leaders, four weavers and one shop owner) as a hobby of Mae Chaem women, providing a supplementary income. Only a few weavers work on *chok* weaving for their main source of income.

**The work-cycles for agriculture and handicrafts** are dependent on the local climate. Seasonal farming and free time for weaving were mentioned by three informants (one group leader and two weavers).

**Table 8.14 Annual calendar of agriculture and handicraft production correlated to the local climate**

Job Activities		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Agricultural activities	Dry farming												
	Rice farming												
	Harvest												
Weaving													

**Dry farming** includes, for example, onions, corns and garlics. Planting dry crops usually cover a period of two to three months and harvesting them can cover a period of one month. Each activity involved in **rice farming**, i.e. growing rice crops and harvesting them, usually covers a period of three months. The time to begin with each of these activities may vary for a month depending on each village. A summer period (March to May) is when farmers are usually free from agricultural activities. So, some turn to weaving at home as a hobby because this could provide supplementary income.



### 8.2.2.3 The values associated with traditional weaving and *chok* textiles

Weavers in Mae Chaem district are opposed to the integrated techniques of weaving that would accelerate production (such as those employed in Long district). Instead, the weavers prefer to continue using the traditional process for weaving *chok* textiles, which is rather complex and time-consuming. They do it as a hobby. Making one piece of *chok* fabric could take a month (or more). Because this traditional process is rather complicated, it requires collaboration from a number of villagers with various skills and skill levels, such as weavers, suppliers of raw materials (cotton, bamboo) and tool makers/repairers to do the things required. *Chok* weaving is therefore regarded among the villagers in Mae Chaem district as a highly valued tradition. In it they see traditional knowledge and skills, the essence and imagination of the weaver (revealed during weaving/patterning), personal meaning and spiritual value, group identity and social responsibility, cultural heritage, historical value (especially in cases where an ancestor supplied intricate textiles to the royal family or aristocrats) and monetary value.



*Sin tin chok* are considered among weavers as a valuable asset, which can be:

- Used occasionally by individuals, for example, to attend Buddhist ceremonies and rituals;
- Given as an enduring legacy in memory of the mother (maker/user) and the family members, especially to daughters (heirs);
- Traded to buyers, or deposited with local weavers – in exchange for cash.

**Figure 8.5**

**A vintage *sin tin chok*, inherited from the mother and with a repair**

### **8.2.3 Finding 3: Community enterprises for textiles and garments**

This research identifies five themes that emerged from the weaving communities of Mae Chaem district, including (i) the mindset of those in the textile business, (ii) objects and products, (iii) production, (iv) the sales system and (v) emerging issues in relation to knowledge.

#### **8.2.3.1 The mindset of people in the textile business**

Involvement in handwoven textiles and garments offers opportunities for income generation to the makers of textile items and the producers and traders of textile products. This was mentioned by three informants (including one group leader, one weaver and one shop owner). There are three types of business operations (i) cooperative groups at village and district levels, (ii) small- and micro-sized community enterprises (SMCEs) and (iii) small- and medium-sized enterprises (SMEs). The number of SMEs is less than the other types.

The mindset of people in the textile business is summarised in Table 8.15. Many do not know about business registration and do not register their business activities. Generally, they just “get on with it”, which means purchasing materials, producing something and then selling it to somebody else – often with no accounting system or receipts.

**Table 8.15 The mindset of people in the textile business**

Areas	Description
Finance	<ul style="list-style-type: none"> <li>▪ Being <b>honest</b> and <b>committed</b> – This helps to build healthy relationships and the credibility of the enterprise among stakeholders.</li> <li>▪ Having a <b>financial plan</b> and balanced management – covering savings and investment. It is crucial to business viability.</li> <li>▪ Seeking <b>funding</b> for business investment from several sources – This may come from personal savings, a bank loan or support from government agencies and other institutions. Financial support is available in different forms, such as funding for projects, access to a market space (e.g. at trade fairs). These depend on the type of business registration. Agencies that provide support to handicraft enterprises include:               <ul style="list-style-type: none"> <li>○ Department of Agricultural Extension (DOAE) – for community enterprise;</li> <li>○ Community Development Department (CDD) – for OTOP projects;</li> <li>○ Department of Industrial Promotion (DIP) – for buildings and construction, e.g. of a distribution centre for handicrafts;</li> <li>○ Department of Intellectual Property – for projects involving Geographical Indications (GI);</li> <li>○ District Administration;</li> <li>○ Bang Sai Royal Folk Arts and Crafts Centre;</li> <li>○ The Support Arts and Crafts International Centre of Thailand (Public Organization) (SACICT).</li> </ul> </li> </ul>
Work culture	<p>Doing business with:</p> <ul style="list-style-type: none"> <li>▪ <b>Happiness</b> – Business is not about doing a stressful job for a high income. Yet this attitude is not applicable to all producers in Mae Chaem district. Some groups take business more seriously in dealing for example with customer orders and deadlines. These groups often link up with producers in other districts/provinces for some parts of production, so that they can produce products in higher volumes within shorter timeframes.</li> <li>▪ <b>Flexibility</b> – For villagers, the nature of handmade production entails flexibility and is not about adhering exactly to design requirements and specifications or standardization. Producers have to be aware of issues relating to time-management, their dependence on the availability of artisans, and interruptions by local traditions.</li> </ul>
Market direction	<ul style="list-style-type: none"> <li>▪ <b>Niche markets</b> – This is about making specific products with a unique identity for sale in a particular market segment, such as clothing made from natural-dyed cotton textiles in contemporary-tribal style for parents and children.</li> </ul>
Development aspects	<ul style="list-style-type: none"> <li>▪ Embracing multiple areas for <b>development</b> – These may include e.g. product design and development for marketing, production development, socio-economic development, human and social development.</li> </ul>

### 8.2.3.2 Objects and products

The textile products of Mae Chaem are usually made in two styles, traditional-tribal and contemporary-tribal. Some are produced for commerce, while some are not.

**Objects with *non-commercial purposes*** relate to needs for household use, village society and local traditions. Objects made for occasional use and special events include those associated with Buddhist ceremonies and rituals (i.e. *sin tin chok*, monk's robes, holy threads and flags).

**Products for commerce** can be classified into groups by product category, including:

- *Handwoven textiles* – in pieces and rolls;
- *Clothing and accessories* – e.g. blouses, trousers, skirts, tube skirts (i.e. *sin tin chok*), bags, hats and scarves;
- *Home accessories* – e.g. pillows, bed sheets and curtains;
- *Souvenirs* – e.g. dolls and key rings.

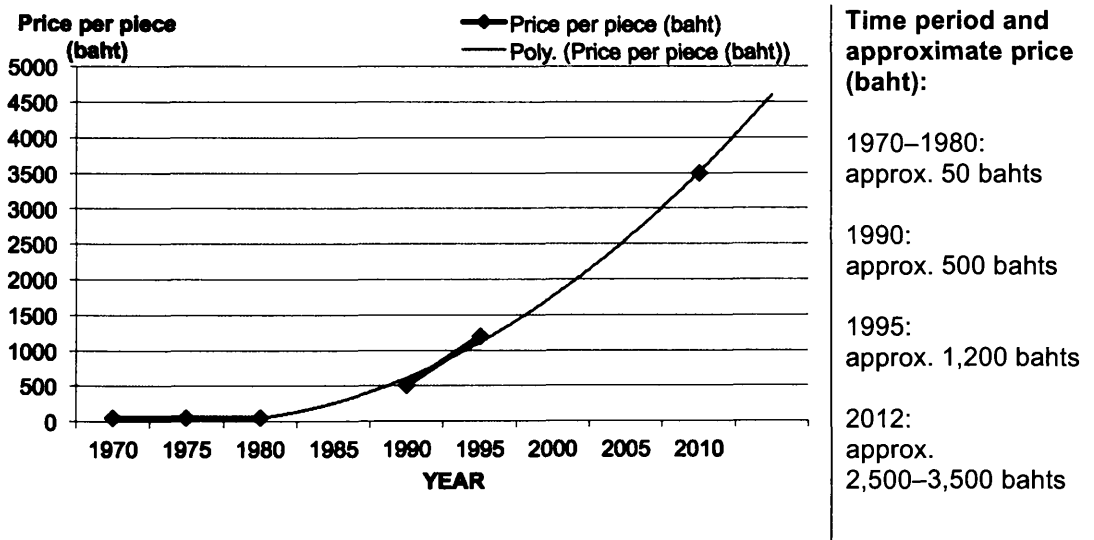
*Sin tin chok* is among several types of products regarded as objects of high value – not only in terms of monetary value, but also spiritual and cultural values (see Section 8.2.2.3). *Sin tin chok* are classified into two types, traditional and contemporary, depending on the fineness of the decorative patterns, and this results in differences in production times and product prices. This was mentioned by 10 informants, including three group leaders, six weavers and one buyer. The analysis of production time for *sin tin chok* in relation to income generation is summarised as follows.

Table 8.16 Analysis of production time for *sin tin chok* in relation to income generation

Subject of Analysis		Pattern Type		Remark
		Traditional	Contemporary	
Price per piece (Thai baht)	Tin Chok (hem piece)	2,500 - 3,500 (77.8\$ - 108.9\$)	750 - 800 - 1,200 (23.3\$ - 24.9\$ - 37.3\$)	Size (before sewing): Width 14 inches x Length 180 cm.
	Sin Tin Chok (tube skirt)	3,800 - 4,000 - 4,500 (118.2\$ - 124.4\$ - 140\$)	1,500 - 2,500 - 3,500 (46.6\$ - 77.8\$ - 108.9\$)	Size (tube skirt with hem): Width 90 cm. x Length 200 cm.
Production time for 1 hem piece	If weaving all day (8-9 hour/day)	15-30 days	3-5, 5-7 days	Number of days vary from patterning motifs, levels of skill of the weavers
	If weaving as a hobby (1-3 hour/day)	30-45 days	15 days	
Buyer / user group		High income i.e. mid-aged people and elders	Lower income i.e. teenagers, young adults	Women's wear
Sale frequency		Less frequently sold (high price)	More frequently sold (low price)	

Three weavers said they believe that the value of handwoven textiles (made by using the traditional process) will continue to increase in the future, giving the example of vintage textiles, which increase in value incrementally over decades. This research finds that this belief relates to the concept of the time value of money (TVM) in financial theory. Information about traditional textiles, and specifically *sin tin chok* and price increments over the past 40 years is presented below.

Figure 8.6 Traditional textiles and incremental increase in monetary value over 40 years – example: a hem piece for *sin tin chok*



The increase in price of *chok* textiles are seen as a result of the promotion of (i) handwoven textiles as collectors' items and for commercial reasons (for example, the registration of 16 traditional patterns for Geographical Indication) and (ii) local festivals relating to the traditional tribal culture in Mae Chaem district. Such price rises could however lead to a situation in which textiles could only be afforded by a few groups of people, such as rich people or the weavers themselves. This could potentially affect the popularity of traditional culture (as mentioned by two visitors/buyers and one shop owner).

### 8.2.3.3 Production

The production of handwoven textiles and garments can be discussed in relation to (i) materials, (ii) production management and networks, (iii) production processes and capacity and (iv) design in production.

Weaving with **cotton threads** is traditional. The community members do produce hand-spun cotton thread locally. Factory cotton threads can also be purchased from shops in the district or at a major market in Chiang Mai and weavers also use factory cotton threads in handloom weaving. Natural colours and **hand-dyed cotton yarns** are available in the district, and chemical dyes can be purchased from shops in the district and beyond.

**Production management** can involve 3 levels of networking.

- *Intra-district networks* comprises several textile communities in highland and lowland villages in Mae Chaem district.
- *Inter-district networks* involves other districts within Chiang Mai province, especially Hot, Doi Tao and Sunpatong districts.
- *Inter-province network* includes producers in other provinces, especially in northern Thailand, such as Chiang Rai and Nan.

Employers usually supply the materials (such as fabric rolls and cotton thread) to artisans. Most artisans work at home and come to the textile centres/shops to collect materials and wages.

**Issues in production management** are identified below.

- *Non-standard production* can result from outsourcing parts of production to other groups and the lack of quality control such as in the production of natural dyed clothing.
- *Lack of financial liquidity* or a shortage of cash depends very much on how group leaders manage finance and on their honesty.
- *Tension between various groups* in textile production relates to business and profits, for example (i) between group leaders, for example with competing claims to be foremost in the market, (ii) between group leaders and group members, concerning for example issues of job allocation, production capacity, product quality and the punctual delivery of products for which the requirements are set by the group leaders and (iii) between weavers and shop owners over issues such as (over)pricing and profit margins. In contrast, weavers themselves work in harmony.

**Production processes and capacity** are based on traditional practice and human labour.

The skills of artisans include weaving, sewing, embroidery and tailoring. The time required to produce a certain quantity of goods varies depending on the product type and skill levels and availability of workers. Production is often interrupted by several local traditions held in village society. Examples of production capacity in relation to the time required for newly-made products are given below. (This was mentioned by eight informants, including three group leaders, three weavers, one shop owner and one buyer).

**Table 8.17 Examples of production capacity and time required for newly-made products**

<b>Newly-made Products*</b>	<b>Quantity</b>	<b>Time (month)</b>
1. <i>Basic</i> level of skill (pillows, scarves)**	10, 100	1
2. <i>Intermediate</i> level of skill (clothing, bags)**	10, 35, 50	1
Maximum order for 1 and 2	1,000	3
3. <i>High</i> level of skill (Chok textiles)	1	1
	10	6

**Remark:**

\* Products made in traditional styles from the traditional weaving

\*\* Minimum order 10 pieces

Customer requests include those for “newly-made” or “made-to-order” textiles. Producers are accustomed to requests for newly-made products, whereas a request for made-to-order products can frighten them and often be rejected. They explained this as follows.

- *A request for newly-made products* – is about making products with *minor* alterations as per customer requests, based on the producer’s existing products or sample products. If producers are confident that these fall within the remit of local artisans and they can deliver the work in time, they will then accept the order.
- *A request for made-to-order products* – is usually seen by producers as stressful. Such orders involve (i) a design specification, which contains complicated details, (ii) standardized products and (iii) a fixed deadline for completion, which often allows little time. Such challenges are often not associated with the ways of living and doing things of the Mae Chaem people. After all, producers often face customer complaints about quality control with standardized products.

**Design in production** often has to do more with product design and development than with production development (as mentioned by four producers, including group leaders and a shop owner). Design in their context is described as (i) the *alteration* in the components, styles, patterns and colours of the traditional products, which usually results in products of a contemporary style, for which books and magazines are the source of the idea or (ii) design which reflects the *essence* of local artisans, which is derived particularly from their ethnic identity.

#### **8.2.3.4 The sales system**

The sales system for textile products from Mae Chaem district is explained in relation to (i) sales areas, (ii) stakeholders in the supply chain and (iii) promotion and distribution channels.

**Sales areas** begin within Mae Chaem district, and shops selling *chok* textiles are found in Banrai, Banthap and Bantongfai villages in Thapa sub-district. The area extends further to other provinces in the northern region, and also other regions in Thailand, including Bangkok.



**Stakeholders in the supply chain** include makers (weavers, artisans, tailors, group leaders), teachers, shop-owners in the district and beyond, tourists in the district (e.g. homestay guests visiting the district) and outside the district (e.g. buyers at trade fairs), designers, business owners and government officers.

They may have multiple roles, which fall into four groups, including maker, producer/buyer, buyer/trader and buyer/user. For example, group leaders can fall into any of these groups. They are makers when they make textiles themselves; also, they may hire community members to produce textiles for them, or buy finished products from other makers for trade; and they may buy textiles from other suppliers for use. Examples of producer/buyers include group leaders, teachers, shop-owners, designer, business owners and government officers. All these stakeholders can also become buyers/traders and buyers/users. It is *not* mandatory that weavers produce and sell textile products specifically for their group leaders only. They also produce textile products and sell to other buyers.

*Group leaders, local shop-owners and teachers* often act as collectors of products to sell to buyers/traders, in Chiang Mai, other provinces and regions and in Bangkok. Shop-owners can, to some extent, influence the makers in terms of product development.

**The promotion and distribution** of textile products from Mae Chaem district take place (i) *within the district*, including homestays, field trips and cultural tours, traditional ceremonies, shops, trade fairs and exhibitions and (ii) *beyond the district*, including shops in major markets (especially Jatujak market (JJ) in Bangkok), department stores, trade fairs and exhibitions.

This research finds that weavers/artisans are able to connect directly with several groups of stakeholders in wider areas through (i) their own shops in major markets and (ii) event spaces at trade fairs supported by external parties (e.g. the Community Development Department (CDD) in the Ministry of the Interior, the Department of Industrial Promotion (DIP) in the Ministry of Industry, the Department of Agricultural Extension (DOAE) in the Ministry of Agriculture and Cooperatives, the Department of International Trade Promotion (DITP) in the Ministry of Commerce, and the SUPPORT Arts and Crafts International Centre of Thailand (SACICT)).

Craft demonstrations and exhibitions at trade fairs can encourage discussions between visitors and weavers or artisans and then purchases. Local events and trade fairs are identified as a key channel for the promotion and distribution of handicrafts, through which sellers can get high gross sales within a short period of time.

Websites were mentioned by only three informants, including one group leader, one shop owner and one weaver, as a channel for the promotion and distribution of handicrafts. In general, producers are not familiar with computers. Only a few producers have registered and manage their own websites. When information about textiles from Mae Chaem district does become available on websites it is because of other groups of stakeholders, for example, government departments/agents, event organizers, project partners and journalists.

#### **8.2.3.5 Emerging issues in relation to knowledge**

Three group leaders addressed issues in relation to knowledge, including (i) producers' fears about sharing knowledge, (ii) the demand for new knowledge by local producers, (iii) the needs for the younger generation to get involved in traditional weaving, (iv) the need for the collection and creation of information about traditional weaving and ethnic textiles to make available in various formats and (v) the inadequacy of mechanisms for knowledge transfer between experienced weavers and the younger generation.

##### **Producers' fears about sharing knowledge**

Producers are reluctant to share their ideas and products with other people because they are afraid that these people will copy the ideas. At district and province levels, copying has become the norm, and has an effect on a highly competitive market environment. Commercialization can to some extent lead to conflicts of interest among groups.

##### **The demand for new knowledge by local producers**

Local producers request new knowledge, in areas such as: marketing, technology (i.e. production technology and computer literacy), production standards and certification, product design and development, market research and communication tools. One shop owner believed that the acquisition of production standards (e.g. the Thai Industrial Standards Institute (TISI)) would also help to distinguish producers and their products from competitors.

## **The needs for the younger generation to get involved in traditional weaving**

Almost all the weavers are currently aged over 40. Many of them are between 50 and 70 years old. The younger generation, aged between 20 and 30 years, are few in number and only a few are involved in textile production as their primary job. It is anticipated that there will be a loss of knowledge about traditional weaving and ethnic textiles in the next 20 to 30 years if there is no action to encourage knowledge transfer between the older and the younger generation. Acquisition of knowledge and skills in traditional weaving takes time, and is gained and honed through regular practice with experienced weavers. For the continuation of traditional textiles, it is crucial to encourage the younger generation to get involved in traditional weaving at as early an age as possible.

## **The need for the collection and creation of information about traditional weaving and ethnic textiles to make available in various formats**

This issue was addressed by two group leaders as a key area to ensure the preservation and continuation of traditional knowledge in weaving and ethnic textiles in the future. In this district, information about traditional weaving and *chok* textiles is available in three formats: (i) *artefacts* (including handwoven textiles, tube skirts and tribal costumes), (ii) *written documents/information* (including field notes, diaries, information sheets, brochures, reports, books, blogs and websites) and (iii) *images* (including photographs, videos and illustrations).

The weavers are familiar with making artefacts, but do not usually produce written documents and images. Part of this issue is about language ability. The weavers are of the Tai Yuan ethnic group, which has its own *spoken* language, yet without a writing system. They speak standard Thai in combination with their own language. However, they are unable to write well in standard Thai.

Only a few local artisans such as schoolteachers and social workers produce written documents (with images) about traditional weaving and *chok* textiles. However, they do this only occasionally and mainly for career reasons. Original documents are available only in hardcopy formats, with no backup as computer files. Overall, knowledge about traditional weaving and *chok* textiles largely remains embedded within the weavers themselves.

## **The inadequacy of mechanisms for knowledge transfer between experienced weavers and the younger generation**

This issue was raised by three group leaders. They identified the current mechanisms, some of which are for transferring weaving knowledge and some for disseminating information about handwoven textiles. They also commented about the suitability of the mechanisms for transferring knowledge between experienced weavers and the younger generations, as well as other stakeholders, as follows.

- **Informal weaving training** for skills transfer and development is commonly provided by weavers for community members. This takes place at home or in a communal area, and is arranged according to the need for specific knowledge and whether or not they have free time.
- **Weaving courses** are organised in only a few local schools for knowledge transfer between experienced weavers and young people. This takes the form of a workshop environment, in which experienced weavers describe and demonstrate weaving, using sample fabrics, i.e. *chok* textiles. Students can practice and make their own pieces of handwoven textiles.
- **Traditional ceremonies, local festivals, trade fairs and exhibitions** that include weaving demonstrations are described as being beneficial to various groups of stakeholders. These events are held in different places, such as temples, schools, markets, shopping centres and convention halls.
- **Handicraft centres and museums** are not very popular among village society, and various reasons are given. Opening hours are limited, irregular or occasional, depending on the owner's availability or whether there is an exhibition. Sometimes they welcome only particular groups of visitors. Furthermore, it requires considerable investment to build a museum, and it is not possible for village/district communities to gain access to large funding for such projects.

- **Libraries and publications**,<sup>16</sup> especially books about traditional weaving and ethnic textiles, are lacking in village society. Instead, they are available in other places outside the district, such as handicraft centres, colleges, universities and government agencies in the centre of Chiang Mai and other provinces. Many of the books<sup>17</sup> on this subject are written by scholars, and focus on history and ethnography (including ethnic identity, textile culture and textile communities). There are not many books about weaving techniques and traditional processes. In fact, books about the textiles of weaving experts that provide photographic information would be useful to weavers, producers and buyers.
- **Computer and Internet websites** are not familiar to villagers, and not in common use.
- **Documentary television programmes** could bring unexpected changes and positive results to the community. This has happened a few times in the past. Since a documentary about weaving by school students was broadcast, the *chok* textiles of Mae Cheam district became known to a wider audience. Some people contacted the school to offer financial support for running a weaving course. Positive feedback from people outside the district, to some extent, led to changes in attitude of parents, who had opposed having weaving courses in school's curriculum, arguing that weaving was not a skill that had a value in the employment market. They then realised the significance of weaving as a part of the cultural heritage of the district, and noted changes in their children, who had grown more assertiveness through participating in the documentary programme.

---

<sup>16</sup> **Publications** include books, magazines, newspapers, reports, academic papers and journals.

<sup>17</sup> **Academic books** which the researcher found locally are about:

- The history of the northern region and the Lanna kingdom;
- The migration of people;
- The ethnic groups of northern Thailand;
- Ethnic traditions, beliefs, identities and costumes;
- The analysis of textile patterns of an ethnic group, e.g. in relation to mathematic formulae;
- An introduction to textile communities with high potential for production.

### **8.3 CASE STUDY 3: A COMPANY RUNNING WEAVING COURSES AND TRAINING IN BANGKOK**

---

An investigation into this company was conducted on the recommendation of a group leader of Long district. It focused on developments in weaving courses and training, handlooms and tools. Findings from the information collected from this company include:

- Finding 1: Reasons for establishing the company;
- Finding 2: Weaving courses, services and products;
- Finding 3: Customers' perspectives on the weaving courses and comments from the business owner on weaving training.

These findings are drawn from the information collected from four informants (including two business owners and two shop assistants). One of the business owners was the key informant.

#### **8.3.1 Finding 1: Reasons for establishing the company**

The key informant explained that the three factors behind establishing the company in 2009 were career opportunity, family requests and passion and empathy for weaving. The informant had experienced periods of disinterest and poor motivation in previous jobs, and thus was seeking a new career. The informant was passionate about weaving and silk textiles, understood their value as part of the cultural heritage of Thailand, and was afraid of the possible demise of weaving communities and handwoven textiles in the near future due to the lack of younger workers, while the current workforces is made up of older people. The informant was persuaded to get involved in the family business of silk threads and fabrics, founded by the parents' generation 40 years previously. However, the informant decided not to enter the family business, but to work in the same field. The informant felt that a business in making handicrafts as a hobby could combine multiple interests and be different from other silk-textile businesses.

For two years prior to opening the business in 2009, the informant (i) did market research on handicrafts as a hobby and (ii) investigated a specific area of silk weaving. The informant identified challenges, critical issues and opportunities as follows.

- **Market research on handicrafts as a hobby**

In large shopping malls in Bangkok, there were several shops offering tuition in handicrafts such as crocheting and knitting and selling materials and tools. These crafts are not of Thai origin, but came from foreign countries a long time ago. Provision for Thai handicrafts such as weaving as a hobby, including training courses, was not generally available in the urban market. Thus, there was an opportunity to develop a weaving course for people residing in an urban area.

- **Investigation into a specific area of silk weaving**

The informant visited weaving communities in several districts in the northeastern and northern regions. Each field visit took between one and two days. In parallel, the informant practised weaving at home and also employed a specialist to develop a modified handloom to suit particular requirements. This revealed the following findings.

- *A few handicraft courses and workshops were available locally* and many of these were in fact organised as fieldtrips to promote cultural tourism. The fieldtrips usually offered between one and three craft demonstrations plus storytelling, followed by a short trial period and the sale of handicrafts locally. This arrangement could not fulfil the need for in-depth understanding and training in the traditional weaving of local artisans.
- *Knowledge of weaving was like a secret of the village.* The informant had a sense that the weaving communities did not want to share their knowledge with outsiders, unless they knew them or they had been recommended by someone. In the weaving communities, the weavers were older, the younger generation was not interested in weaving, and those with an interest had limited access to knowledge groups. This state of affairs could have led to the loss of the handicraft culture. The question was what could be a platform for knowledge-sharing and the revitalisation of the handicraft culture, and how could it work and for whom?

- *Traditional silk weaving was perceived as being difficult and reserved for professionals, because production was time-consuming with several complicated processes. This presented an opportunity to facilitate a change in people's perceptions of silk-weaving. For example, a weaving course could be enjoyable and not too difficult, and could generate personal artwork and pride within a short period of time. This idea seemed fit in with the lifestyles of urban people and so a business with training courses in silk-weaving using simplified techniques was launched as a hobby for urban people.*
- *Equipment and tools were cumbersome. Traditional handlooms were too large and difficult to transport. This led to a requirement to design a compact handloom that could be folded and carried. A consultant was hired to design a compact handloom, which later was produced and used in the weaving courses.*

### **8.3.2 Finding 2: Weaving courses, services and products**

In 2009, the company started business with two weaving courses at two levels and two shops in an office building and a high-end shopping centre in the centre of Bangkok. In the hobbies zone of the shopping centre there were several competitors, including knitting, crochet, sewing and tailoring and embroidery. Yet the informant realised that these businesses were in fact complementing each other. Weaving and sewing would need to be together.

Six months after opening, the business had become better known because of a television programme, followed by coverage in newspapers and magazines. Information about the weaving courses had also been passed on to people through word of mouth, Internet websites and social media. Over time, the company developed and launched more weaving courses at more advanced levels, and offered special sessions and products in response to customer feedback and requests, for example specialist courses in patterning with advanced techniques, creating products of customers' own choosing (e.g. scarves and handbags), preparing warp threads or purchasing a handloom.

So far, the company has had more than 600 customers (2009–2012). However, fewer than a hundred are really interested and have continued with weaving for skills development and



product creation. Of those who have become skilful in weaving, some have requested training in the preparation of warp yarns, while many find the weaving process and product creation more enjoyable.

**Potential customers** are identified as follows.

- People who need to improve their concentration span such as children.
- People who do not yet fully understand what the company offers.

**Figure 8.7 Showcases of handmade products**



Weaving courses and workshops are the core service of the business, offering skills development and the revitalization of weaving culture through the creation of artefacts that suit the learner's preferences. The company also sells silk yarns and handlooms to support its service, as well as handmade products. However, producing handmade goods for sale to customers is not its first priority. Nevertheless, the showcases of handmade products can inspire customers to enrol in the courses.

**The sale of modified handlooms** is small in number, with between three and five being ordered at a time by organisations. At the beginning, the company did not want to sell modified handlooms and preferred to use them for weaving courses and training only. However, it was then decided to sell them on request. Almost all individual customers do not wish to purchase a handloom and tools for weaving at home. Instead, they would prefer to return to the shop for the new courses, coursework, service and consultancy and the stimulating environment and socialization on offer.

Information about the company's services and products are summarised below.

**Table 8.18 Weaving courses and special sessions offered by the company**

<p><b>1. Weaving courses</b></p> <p>The company offers four courses in <i>simplified</i><sup>18</sup> weaving techniques. Each course takes about two hours and learners will be able to weave a small piece of fabric. To take the courses at higher levels, learners are required to have completed the earlier courses.</p> <p>Silk yarns are used as material. Training techniques include brief oral instruction and practice-based learning. The training is set in a relaxing and comfortable environment and encourages learners to produce neat pieces of work at their own pace. The training is not about serious work and fast weaving.</p> <ul style="list-style-type: none"> <li>▪ <b>Weaving level 1:</b> Basic weaving technique This is to mix multicolour yarns and create striped patterns.</li> <li>▪ <b>Weaving level 2:</b> Advanced weaving technique Learners “will be able to create geometric and free-form patterns”.</li> <li>▪ <b>Weaving level 3:</b> Traditional technique Learners will be able to “create raised weave (Jacquard)”.</li> <li>▪ <b>Weaving level 4:</b> Embedded patterns Learners will “learn to create windows in the fabric”.</li> </ul>
<p><b>2. Special sessions</b></p>
<p><b>2.1 Kids’ corner</b></p> <p>These special sessions are designed to suit the demands of interest groups within the resources of the business.</p> <ul style="list-style-type: none"> <li>▪ <b>Small shoulder bag</b> Time: 1.5 hours. Suitable for children aged six years and above.</li> <li>▪ <b>Kid’s scarf (12x100 cm.)</b> Time: 2–3 hours. Suitable for children aged seven years and above.</li> <li>▪ <b>Freestyle weaving</b> Time: flexible. The time varies depending on the children’s concentration span or until they feel satisfied. They can choose to make the fabrics into products they want, e.g. bags.</li> </ul>
<p><b>2.2 Half-day scarf</b></p> <p>Without having taken the level 1 course, customers can attend a specific session to make a scarf of 150 cm in length using basic weaving, with no detailed work. Learners will be able to finish a scarf within three hours and take it home.</p>
<p><b>2.3 Group weaving</b></p> <p>The company can arrange special sessions for groups of up to 10 persons at a time. This is suitable for a group of friends, school students or organizations.</p>
<p><b>2.4 Members with paid coursework for product creation</b></p> <p>After completing the level 1 course, learners will be able to weave their own silk scarf and make other products, e.g. a handbag, as shown in the shop. They may use their own design or choose from the product showcases displayed on the company’s website or in shops, making adjustments to yarn colours, sizes or additional materials, for example. Customers need to make an appointment with the company to schedule this sort of coursework. Prices vary according to the design and materials. They are requested to finish their coursework within 15 days of starting.</p>

<sup>18</sup> **Simplified weaving techniques** are adapted from the traditional practices of weavers in provincial areas.

Other products offered by the company are as follows.

- **Silk yarns** – The company sells various types of silk, in different textures, colours and sizes of yarn (yarn count), in bundles.
- **Finished products** – Products from the *handmade workshop* include scarves, handbags, pillows, neckties and tablemats. There are also items knitted from silk yarns. Products from *factory production* include silk bedding and nightwear.
- **Handlooms** – *The floor loom* is designed to save space and to be convenient to use. The loom has a steel frame, is rigid in construction yet foldable and portable. The maximum weaving width is 50 cm. *The table loom* is designed to be compact, lightweight and portable. The maximum weaving width is 40 cm.

### **8.3.3 Finding 3: Customers' perspectives on the weaving courses and comments from the business owner on weaving training**

This section presents divergent perspectives on the weaving courses, from the customers and from the researcher as a customer. This is followed by comments from the business owner on weaving training.

#### **8.3.3.1 The customers' perspectives**

Customers had divergent views of the weaving courses in relation to the fees and what they had learned.

**Customers who saw the courses positively** thought the courses were inexpensive because they were able to develop several patterns and create products. They could come to the shop by appointment and use the facilities and materials to make products. The shop assistants would be there to assist them with other techniques, including weaving and sewing. Nevertheless, some members return to weaving only intermittently, in some cases just once in six to 12 months. This depends on their circumstances and other external factors, such as travel commitments, natural disasters (such as floods) and political unrest. When their own countries faced difficult situations, they were not in a mood to relax and thought making handicrafts was a luxury rather than a necessity.

**Customers who saw the courses negatively**, in contrast, felt that they were expensive.<sup>19</sup>

Some said that what they got was no more than a basic knowledge of weaving, the woven fabrics were too small, and the weaving courses were not interesting and not worth the money.

### **8.3.3.2 The perspective of the researcher as a customer**

The researcher took two weaving courses because of a curiosity in the courses, modified handlooms and training techniques. In each course it took about two hours to complete a piece of work, for which a sample was given. The service, facilities and materials were well prepared. The overall experience was full of excitement and happiness, yet exhaustion was experienced towards the end of the second course. The researcher had the feeling that weaving was not too difficult, but things could be forgotten very quickly afterwards, especially if one did not have time to return to do more coursework. The course fees (2012) were considered high for the knowledge gained and the artefacts made on the courses.

### **8.3.3.3 Comments from the business owner on weaving training**

Besides the passion for silk textiles and an intention to revitalize part of the cultural heritage (weaving) through teaching, this business stimulates feelings of enjoyment, happiness and delight in weaving. When customers experienced such feelings, they also had a sense of achievement and wanted to go on to the next course level or to special sessions. The weaving courses and training could be considered a platform for:

- Practice-based learning and knowledge sharing;
- Creating a sense of happiness resulting from progress, achievement and success;
- Developing creativity and productivity in hand-woven textiles;
- Skill development.

The happiness and delight felt when training someone to be able to do something is a totally different feeling from selling finished goods directly to the customer. All in all, it builds on

---

<sup>19</sup> **Expensive:** In 2012, the price for each course was 1,800 baht. A course usually takes 2 hours. Yet, it allows some flexibility, e.g. up to three hours for completion.

assertiveness and a belief in doing. The informant really hopes that weaving and handmade products will become popular among the younger generation, not only in the cities but also in rural areas. Weaving training might also lead to creating employment opportunities and a viable income for people in rural areas. If this does happen, then many migrants might consider returning to their hometown.

Regarding job employment and income generation, the researcher enquired whether weaving could really be a job from which artisans could earn an income and make a living. The informant mentioned difficulties resulting from a lack of producers' understanding of pricing and underpayment or underpricing by stakeholders. Prices are usually based on materials and labour costs. Yet, in this context, labour costs seemed to be set very low (or sometimes not included at all), especially costs per piece. The value of handwork is being devalued.

#### **8.4 CHAPTER SUMMARY**

---

This chapter has presented the findings from an analysis of three cases studies in the weaving communities and enterprises of the Tai Yuan in northern Thailand, including (i) Long district (Phrae province) and (ii) Mae Chaem district (Chiang Mai province). It also offered a supplementary case (iii) of a company running weaving courses and training in Bangkok. The research findings from these case studies are recapitulated in Table 8.19.

Next, chapter 9 presents the seven main research findings drawn from the literature review, the semi-structured interviews and the case studies.

**Table 8.19 Summary of research findings from the case studies**

Research findings	Section
<b>Case study 1: Weaving communities in Long district (Phrae province)</b>	
<b>Finding 1:</b> Background of textiles in Long district (1950–2012) <ul style="list-style-type: none"> <li>• Development in textile production (1950–2012)</li> <li>• The changing significance of weaving in relation to income generation</li> <li>• Feedback on development projects run by government departments/agents</li> </ul>	8.1.1
<b>Finding 2:</b> Current practices in textile products, production and sales	8.1.2
<b>Finding 3:</b> The main area for future development: weaving knowledge <ul style="list-style-type: none"> <li>• Problem identification</li> <li>• Mechanisms for transferring knowledge in weaving and providing information about ethnic textiles</li> <li>• Discussions and recommendations specific to weaving courses and training</li> </ul>	8.1.3
<b>Case study 2: Weaving community in Mae Chaem district (Chiang Mai province)</b>	
<b>Finding 1:</b> Development projects in the weaving communities <ul style="list-style-type: none"> <li>• Contextual factors in the 1990s</li> <li>• Feedback on development projects</li> <li>• Development projects led by a non-governmental group</li> </ul>	8.2.1
<b>Finding 2:</b> The way of life of the people in Mae Chaem district <ul style="list-style-type: none"> <li>• Principles of life</li> <li>• Local occupations</li> <li>• The values associated with traditional weaving and <i>chok</i> textiles</li> </ul>	8.2.2
<b>Finding 3:</b> Community enterprises for textiles and garments <ul style="list-style-type: none"> <li>• The mindset of people in the textile business</li> <li>• Objects and products</li> <li>• Production</li> <li>• The sales system</li> <li>• Emerging issues in relation to knowledge</li> </ul>	8.2.3
<b>Case study 3: A company running weaving courses and training in Bangkok</b>	
<b>Finding 1:</b> Reasons for establishing the company	8.3.1
<b>Finding 2:</b> Weaving courses, services and products	8.3.2
<b>Finding 3:</b> Customers' perspectives on the weaving courses and comments from the business owner on weaving training <ul style="list-style-type: none"> <li>• The customers' perspectives</li> <li>• The perspective of the researcher as a customer</li> <li>• Comments from the business owner on weaving training</li> </ul>	8.3.3

# Chapter Nine

## The Seven Main Research Findings, and Conclusions

### 9.0 INTRODUCTION

---

This research investigated the potential of *design for sustainability* in the handicrafts sector of northern Thailand. Specifically, **the study aimed to:**

- Develop an *in-depth understanding* of the *relationship* between sustainability, design and craft among the various stakeholders engaging in the handicrafts sector as producers, supporters (e.g. government agents, educational institutions, the private sector, associations, NGOs), and buyers;
- Provide *examples* of handicrafts along with *criteria* by which they are compatible with *design for sustainability* (according to Walker's Quadruple Bottom Line of Sustainability, comprising: personal meaning, social responsibility, environmental care, and economic viability (Walker, 2011, p.190));
- Identify *potential areas* in which design can contribute to the long-term viability of the handicrafts sector, and simultaneously reinforce the implementation of sustainability, i.e. Walker's Quadruple Bottom Line of Sustainability.

This thesis has already presented the research findings from each of **the three major data sources**. These are:

- *A literature review* – about sustainability, design and craft gathered from international and local sources (specific to northern Thailand) (Chapters 2–5);
- *Semi-structured interviews* – conducted with 26 informants involved in the handicrafts sector of northern Thailand as producers (n=10), supporters (n=11) and buyers (n=5) (Chapter 7);
- *Case studies* – including two main cases, namely the weaving communities and textile enterprises in Long district (Chiang Mai province) and Mae Chaem district

(Phrae province) in northern Thailand, and one supplementary case of a company running weaving courses and training in Bangkok (Chapter 8).

Here, **seven main research findings** are identified in relation to the research questions, from the analysis of information from these three major data sources. These seven main research findings are described in Sections 9.1–9.7, and summarised in Section 9.8. This chapter also discusses the contributions of the research to knowledge and potential beneficiaries (Section 9.9); and the limitations of the research (Section 9.10). It ends with concluding remarks (Section 9.11).

### **9.1 MAIN RESEARCH FINDING 1: HANDICRAFT PRODUCTION (INCLUDING THE WEAVING OF THE TAI YUAN ETHNIC GROUP IN NORTHERN THAILAND) IS COMPATIBLE WITH ALL THE ELEMENTS IN WALKER'S QUADRUPLE BOTTOM LINE OF SUSTAINABILITY (PERSONAL MEANING, SOCIAL RESPONSIBILITY, ENVIRONMENTAL CARE AND ECONOMIC VIABILITY).**

---

This section addresses research question 1: *What are the relationships between the handicraft production of northern Thailand and sustainability?* This research concludes that the benefits of handicraft production (including the weaving of the Tai Yuan ethnic group) are compatible with all the elements in Walker's Quadruple Bottom Line of Sustainability (personal meaning, social responsibility, environmental care, and economic viability) (Walker, 2011, p.190). This became evident from information gathered from the literature review (Section 5.1.1), semi-structured interviews (Section 7.2) and three case studies (Sections 8.1, 8.2, 8.3).



**Table 9.1 The benefits of handicraft production  
(including the weaving of the Tai Yuan ethnic group in northern Thailand)  
in relation to Walker's Quadruple Bottom Line of Sustainability (2011)**

The elements of Sustainability (Walker, 2011)	The benefits of handicraft production	The benefits of weaving
Personal meaning	Personal development and personal meaning	<p>Through the process of making handwoven textiles, weavers gain:</p> <ul style="list-style-type: none"> <li>• Happiness and peace;</li> <li>• A sense of self-expression, individuality, as well as belonging to their ethnic group, which has a unique identity;</li> <li>• A sense of the value of and pride in traditional practices, local art and culture;</li> <li>• A sufficient way of living.</li> </ul>
Social responsibility	<ul style="list-style-type: none"> <li>• Strengthening of the communal and social capital</li> <li>• Socio-economic development</li> <li>• Socio-cultural value</li> </ul>	<p>Weaving is a tradition, which has been inherited by the ethnic groups of the region, especially women. Weavers regularly practice weaving to gain, develop and retain their traditional knowledge and skills in textile production. They also pass these on to other villagers, i.e. their family members, through informal training conducted at home.</p> <p>Due to the slow and complex process of producing handwoven textiles, weavers need to collaborate with other people in their village.</p> <p>These activities reflect a system that builds (i) skills training, traditional knowledge and knowledge transfer and (ii) a kind of "brother and sister" relationship and solidarity among various groups of people in the villages of the region.</p>
Environmental care	Environmental awareness	<p>Weavers and artisans appreciate the use of natural materials, which are available or can be sourced locally, in many aspects of their lives. This has become their material culture, e.g. the use of cotton yarns in textile production. They are concerned about the impact of their work on people and places, i.e. the disposal of natural materials.</p>
Economic viability	Socio-economic development	<p>Weavers make handwoven textiles as a hobby or part-time job, which can provide a supplementary income or savings.</p>

**Handicraft production** is accepted by various groups of people in northern Thailand as part of their way of living, especially in terms of the ways in which they produce, trade and use handicrafts. Handicraft production is to some extent associated with a belief in Buddhist principles and traditional rites. It offers various benefits as follows:

- Personal development and personal meaning;
- Strengthening communal and social capital;
- Socio-economic development;
- Socio-cultural value;
- Environment awareness.

**Personal development and personal meaning** is identified from the literature review (Table 5.1(R2, R6b)), the semi-structured interviews (Section 7.2.4) and the three case studies (Sections 8.1.2.2(A, E), 8.2.1.3, 8.2.2, 8.2.3.2, 8.3.1).

- *Personal development* includes the skills and knowledge gained from the traditional practice of making handicrafts, such as the traditional weaving and textile production of ethnic groups, which involves various activities, e.g. making hand-spun cotton yarns, natural dyed yarns and the traditional patterns and clothes of ethnic groups, and exchanging raw materials and goods between communities.
- *Personal meaning* involves: spiritual meaning, self-expression and a sense of fulfilment. *Spiritual meaning* is related to religious beliefs (Buddhism), for example when weavers produce the particular tube skirts to wear when attending religious ceremonies, or demonstrate traditional weaving for a religious ceremony. *Self-expression* occurs while making handicrafts, i.e. using weaving techniques that allow them to express their ideas and show their skill. *A sense of fulfilment* comes in various ways, such as from having a purpose in life (i.e. making handicrafts as a productive activity) and being acknowledged within a group, having a sense of achievement and satisfaction from loving what they are doing and having pride in and empathy for local history, art and culture, which reinforces a sense of personal identity and belonging.

**Strengthening communal and social capital** is identified from the literature review (Table 5.1(R2)) and the three case studies (Sections 8.1.1.1, 8.1.2.2, 8.2.1.3, 8.2.2.3, 8.3.2, 8.3.3.3). Handicraft production can stimulate collaboration, solidarity and care among various communities in rural localities. In the case of handwoven textiles, the production process is

rather complex and requires collaboration and solidarity from a number of people with various skills and skill levels. This interdependence serves to strengthen relationships among the people living in the various communities of the region. Also, since weavers can work at home, they are able to deal with domestic responsibilities such as taking care of children and elderly relatives. This reflects a system of care within the communities.

**Socio-economic development** within village society is identified from the literature review (Table 5.1(R2, R3, R4, R5)), the semi-structured interviews (Section 7.2.1) and the three case studies (Sections 8.1.1.1, 8.1.1.2, 8.1.2.2(E), 8.2.1, 8.2.2.2, 8.2.2.3, 8.2.3.1, 8.3.1). Handicraft production can contribute positively to socio-economic wellbeing by providing productive part-time employment and financial income, especially at the local level. Some older people (60s, 70s) still do basic weaving, which requires relatively low levels of skill and time, and can provide supplementary income. Some mid-aged weavers (30s, 40s) prefer advanced weaving, which is complicated and time-consuming, although, it can command a higher price. In the case study of Long district, out of 11 informants (including group leaders/producers, experienced weavers, weavers with basic skill, local purchasers/shop owners and villagers), three main perspectives towards weaving in relation to its economic benefits are found. Weaving can be seen as (i) a productive activity providing economic viability, (ii) a part-time activity providing an additional income or (iii) not worth doing (Section 8.1.1.2).

**Socio-cultural value** is identified from the literature review (Table 5.1(R2)), the semi-structured interviews (Sections 7.2.1, 7.2.5) and the three case studies (Sections 8.1.1.1, 8.1.2.2(E), 8.2.1.3, 8.2.2.1, 8.2.2.2, 8.2.2.3, 8.2.3.2, 8.3.1). Handicraft production is discussed in terms of cultural heritage, local identity and the identity of Thailand, going beyond monetary value and economic indicators. For example, the production of handwoven textiles among ethnic groups has been passed down over the generations, and inherently part of their group identity, religious beliefs, and pride in local art, culture and history (going back particularly to the times when weavers supplied fine-quality textiles to the royal family and aristocrats).

**Environmental awareness** is identified from the literature review (Table 5.1(R2)), the semi-structured interviews (Section 7.2.1) and two of the case studies (Long and Mae Chaem districts, Sections 8.1.1.1, 8.1.2.1, 8.1.2.2, 8.2.2.1, 8.2.2.2, 8.2.2.3). This reflects a sense of responsibility among the various people engaging in handicraft activities for their impact on

people and places, e.g. evident in the efficient use of natural resources at production sites, using things until they are worn out, the way waste is disposed of, and generally working in a way that does not harm local environment. However, there are concerns about the depletion of natural resources resulting from a lack of planning for resource management and a focus on market-led production, e.g. in the use of particular types of clay for making pottery or hardwood for making furniture.

## **9.2 MAIN RESEARCH FINDING 2: THREE HANDICRAFTS WERE FOUND TO HAVE STRONG POTENTIAL FOR *DESIGN FOR SUSTAINABILITY*, INCLUDING TEXTILES, FURNITURE AND JEWELLERY. THIS IS BASED ON FOUR CRITICAL FACTORS AFFECTING THE LONG-TERM VIABILITY OF HANDICRAFT ENTERPRISES, NAMELY: PRODUCTION CAPACITY, PRODUCT VIABILITY, MARKET FEASIBILITY AND LEGISLATION.**

---

This section addresses research question 2: *Which handicrafts of northern Thailand have potential in relation to design for sustainability? And what are the selection criteria for these handicrafts?* The research findings are organised into three main themes:

- Three handicrafts in the region that have strong potential in terms of *design for sustainability* – and a handicraft identified for in-depth case studies;
- Four critical factors affecting the long-term viability of handicraft enterprises in the region;
- Compatibility between the elements of the four critical factors affecting the long-term viability of handicraft enterprises in the region and the elements in Walker's Quadruple Bottom Line of Sustainability.

### **9.2.1 Three handicrafts in northern Thailand that have strong potential in terms of *design for sustainability* – and a handicraft identified for in-depth case studies**

This research identifies three handicrafts in the region that have strong potential in terms of *design for sustainability*, including:

- Handwoven textiles and garments;
- Furniture made of wood and fibrous plants such as bamboo;
- Silver jewellery and costume jewellery.

This became evident from the literature review (Section 4.5.2) and the semi-structured interviews (Section 7.3.2).

**The literature review** identified ten product categories that have market feasibility. These products are carpets, celebration items (e.g. for wedding ceremonies, birthday anniversaries, local festivals), furniture, garments and textiles, gifts, home decoration, jewellery, toys, wickerwork (e.g. for basketry and furniture components) and yarn products (Section 4.5.2).

**Semi-structured interviews** were used to identify the handicrafts in the region that have strong potential for long-term viability. In this context, the term “handicrafts with long-term viability” elicited more relevant responses than “handicrafts in relation to *design for sustainability*”. Informants could clearly identify their selection criteria for handicrafts with long-term viability, while they were unclear about “*design for sustainability*”. However, their selection criteria were compatible with sustainability (explained in Sections 9.2.2–9.2.3).

Semi-structured interviews were conducted with 26 informants who were involved in the handicrafts sector of northern Thailand as producers (n=10), supporters<sup>1</sup> (n=11) and buyers (n=5) (Section 7.3.2.1). When presented with ten product categories, the informants were asked to (i) identify three handicrafts in the region that have strong potential for long-term viability and (ii) prioritize them in order – first priority (very high potential), second priority (high potential), third priority (medium potential).

Of the 26 informants, 20 suggested 2–3 handicrafts, while six producers did not give an opinion because they felt they had only limited knowledge of other handicrafts produced in the region and were not comfortable about making a judgement. Results from the 20 informants identified three handicrafts as having strong potential for long-term viability (Section 7.3.2):

---

<sup>1</sup> **Supporters:** People who are directly or indirectly associated with the handicrafts sector.

- Furniture made of wood and fibrous plants (30 points);
- Handwoven textiles and garments (29 points);
- Silver jewellery and costume jewellery (27 points).

To identify just one group of handicrafts for in-depth study in relation to *design for sustainability*, a qualitative content analysis of the advantages and disadvantages of these three handicrafts was taken into consideration (see the literature review (Section 4.5.2) and the semi-structured interviews (Section 7.3.2)).

- **Furniture made of wood and fibrous plants** – have *disadvantages* in terms of (i) the skills of the craftspeople involved, which need to be improved, (ii) the shortage of raw materials, i.e. hardwood, which leads to the issue of illegal wood for production and trade, (iii) the increasing cost of labour and (iv) legislation (e.g. import/export laws and fumigation requirements) constraining the production and distribution of products made of wood/fibrous materials in Thailand and destination countries worldwide, which was commented on as being rigorous or varied or confusing. However, the *advantages* were identified in terms of established domestic (i.e. tourist) and international markets.
- **Handwoven textiles and garments** – have *advantages* in terms of (i) the high levels of skill and production techniques of the craftspeople, (ii) the availability of raw materials, i.e. silk and cotton, some of which are cultivated and produced or could be sourced locally for local production (however, this was mentioned as an area in need of development to prevent shortages of raw materials in the near future), (iii) well established domestic (i.e. tourist) and international markets and (iv) possibilities for market expansion in a wide range of product categories, i.e. textiles, fashion accessories and home furnishings. Nevertheless, the *disadvantage* was the increasing cost of labour.
- **Silver jewellery and costume jewellery** – have *advantages* in terms of (i) the high levels of skill and the production techniques of the craftspeople who make products with a unique identity, (ii) the high frequency of traded products in markets and

(iii) established domestic (i.e. tourist) and international markets. However, the *disadvantage* was said to be a lack of sources of raw materials locally, i.e. silver, other metals and synthetic beads, which are largely imported from other countries, resulting in fluctuating costs.

Of these three handicrafts, **handwoven textiles and garments** was identified as having the *most* potential for long-term viability in relation to *design for sustainability* because of advantages in the availability of raw materials in the rural localities and established markets. It was therefore decided to search for case studies among weaving communities and textile enterprises in northern Thailand.

There are several types of handwoven textiles and garments, many of which are produced by ethnic groups in this region. The majority of the population in this region belong to **the Tai Yuan group**. To identify **case studies**, this group was therefore chosen as representing the production of ethnic textiles in northern Thailand. Their weaving communities usually produce **chok textiles and clothing**, especially tube skirts, using the *chok* weaving technique and cotton yarns as the main material. *Chok* weaving is part of their traditional culture, which has been handed down within the group over the generations. This was clear from information collected from the field research (including literature identified by key informants) and discussions with informants about the choice of case studies.

From the case studies, this research finds that the practices among the weaving communities and textile enterprises of the Tai Yuan ethnic group are compatible with sustainability, in terms of:

- *Their local way of life*, i.e. traditional weaving and textile culture that clearly *demonstrates* all the elements in Walker's Quadruple Bottom Line of Sustainability;
- *Potential areas of design for sustainability* that could foster the development of weaving communities and textile enterprises in the region for long-term viability;
- *Collaboration between craft and design for sustainability* at a local level that could potentially nurture a sustainable society comprising various stakeholders engaged in

the handicrafts sector as producers, supporters (e.g. government agents, educational institutions, the private sector, associations, NGOs) and buyers.

A strong affinity with the ethos of sustainability became evident from the case studies of weaving communities and textile enterprises in Long district (Phrae province) (Section 8.1) and Mae Chaem district (Chiang Mai province) (Section 8.2).

### **9.2.2 Four critical factors affecting the long-term viability of handicraft enterprises in northern Thailand**

In the process of identifying the handicraft enterprises that have strong potential for long-term viability in the region, various factors were mentioned. These were consolidated into four critical factors:

- *Production capacity* – relating to craftspeople and their (high) levels of skill and unique techniques in production, the availability of raw material locally (e.g. cotton), production costs (i.e. labour and material costs) and sustainable development;
- *Product viability* – relating to the ability to develop products to satisfy critical requirements, such as products with a practical function that suit customers' lifestyles, product development for market feasibility, products with a price appropriate for the marketplace, environmentally friendly products and fair trade products;
- *Market feasibility* – relating to the chance that products can enter well established markets or expand to other market segments in which, for example, products can be positioned with a high price, have high market share, high frequency or volume of trade and perhaps face fewer competitors;
- *Legislation* – relating to various laws (e.g. labour laws, environmental laws and import/export laws) which govern the production and distribution of handicrafts in Thailand and destination countries worldwide.

These factors became evident from information gathered from the literature review (Section 4.5.2), the semi-structured interviews (Sections 7.3.2) and the case studies (Section 6.3.2). Each factor comprises several elements, as described in Table 9.2.



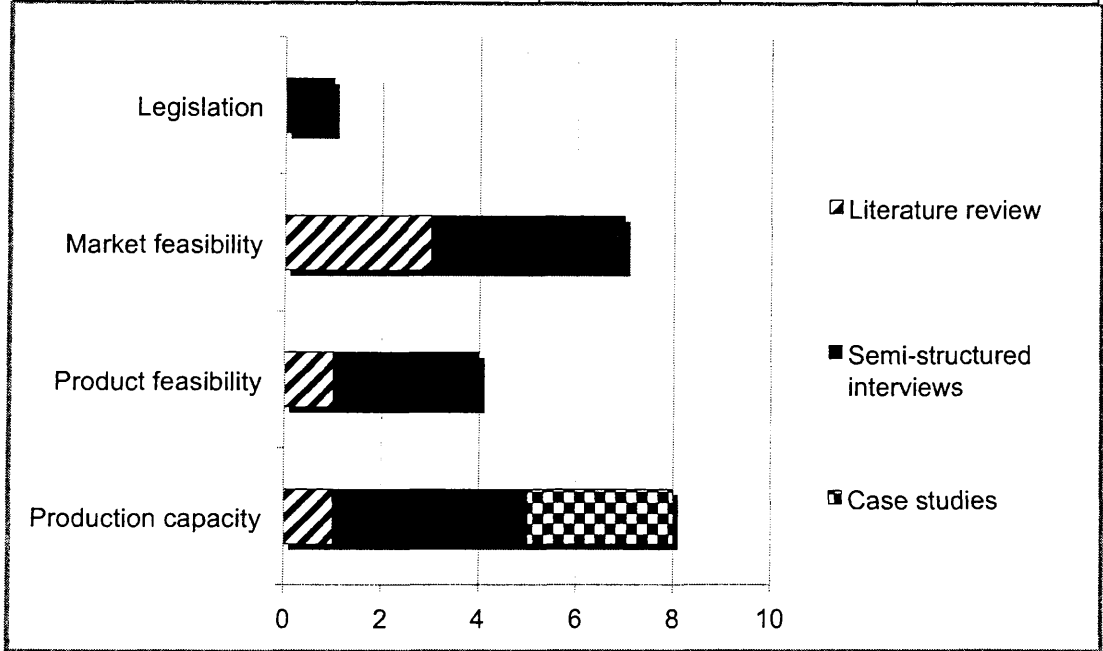
**Table 9.2 Four critical factors and their various elements affecting the long-term viability of handicraft enterprises in northern Thailand**

CRITICAL FACTOR	Literature review	Semi-structured interviews	Case studies
<b>PRODUCTION CAPACITY</b>			
Handicrafts for which craftspeople have high levels of <i>skill</i> and unique production <i>techniques</i> , e.g. traditional weaving with particular techniques such as <i>chok</i> , passed down over the generations among ethnic groups (i.e. the Tai Yuan)	√	√	√
Availability of raw materials in rural localities, e.g. cotton		√	√
Production costs, i.e. labour and material costs		√	
Sustainable development in production		√	
Credibility and public recognition of producers at the national level			√
<b>PRODUCT VIABILITY</b>			
Products with a practical function, which are related to customers' lifestyles		√	
Possibilities to develop products in relation to market feasibility, such as those which could expand to other market segments, e.g. home furnishings, clothing and fashion accessories		√	
Price		√	
Environmentally friendly products, fair trade products	√		
<b>MARKET FEASIBILITY</b>			
Products with a high price and high market share	√	√	
Frequently traded products	√	√	
High volumes of exported goods and opportunities to enter global markets	√		
Well established markets, i.e. the domestic and tourist markets, exports		√	
Perhaps with fewer competitors in international markets		√	
<b>LEGISLATION</b>			
Legislation affecting the production and distribution of handicrafts in Thailand and destination countries worldwide, e.g. labour laws, environmental laws, import/export laws, which may vary in places both within Thailand and between countries worldwide, e.g. the fumigation requirements of countries importing products made of wood/fibrous materials		√	

The elements of these four critical factors received **various degrees of attention** from the three major data sources. To determine more clearly the level of importance, each tick (√) in Table 9.2 (above) was assigned a numerical value (1) and the results are shown in Table 9.3 (below).

**Table 9.3 Four critical factors and levels of attention in the three major data sources**

Data source	Degree of attention			
	Production capacity	Product viability	Market feasibility	Legislation
Literature review	1	1	3	0
Semi-structured interviews	4	3	4	1
Case studies	3	0	0	0



Considering each data source separately, in the process for identifying *case studies*, informants mentioned only production capacity, while *the literature* emphasised market feasibility and product viability as well as production capacity. However, these two sources did not mention legislation. In contrast, *the semi-structured interviews* provided a holistic approach covering all four critical factors (production capacity, product viability, market feasibility, legislation) which affect the long-term viability of handicraft enterprises in the region.

Considering each critical factor separately, all three major data sources indicated *production capacity* as a critical factor affecting the long-term viability of handicraft enterprises in the region. This was strongly emphasized by informants in the semi-structured interviews and in the process for identifying case studies. However, production capacity received far less attention in the literature. *Market feasibility* and *product viability* were addressed in the literature review and the semi-structured interviews, while these two factors were not

mentioned in the process for identifying case studies. *Legislation* was the least mentioned, and only by informants in the semi-structured interviews.

**9.2.3 Compatibility of the elements of the four critical factors affecting the long-term viability of handicraft enterprises with the elements in Walker’s Quadruple Bottom Line of Sustainability**

These four critical factors (production capacity, product viability, market feasibility and legislation) are compatible with all the elements in Walker’s Quadruple Bottom Line of Sustainability (personal meaning, social responsibility, environmental care and economic viability). Table 9.4 shows an example of the compatibility between these elements.

**Table 9.4 Compatibility of the elements of the four critical factors affecting the long-term viability of handicraft enterprises with the elements in Walker’s Quadruple Bottom Line of Sustainability**

Personal meaning	Social aspects	Economic aspects	Environmental aspects
<ul style="list-style-type: none"> <li>• The traditional practices of craftspeople, which relate to their ethnicity and cultural heritage and which require high levels of skill and unique techniques of production, e.g. the Tai Yuan ethnic group and <i>chok</i> weaving</li> <li>• Products with a practical function related to customers’ lifestyles</li> </ul>		<ul style="list-style-type: none"> <li>• Production costs</li> <li>• Pricing structure</li> <li>• High market share</li> <li>• Frequency of traded products</li> <li>• High volume of exported goods</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental laws</li> </ul>
	<ul style="list-style-type: none"> <li>• Well established markets</li> </ul>		
<ul style="list-style-type: none"> <li>• Credibility and public recognition of local producers at the national level</li> </ul>			
<ul style="list-style-type: none"> <li>• Availability of raw materials locally and production development in relation to sustainability</li> <li>• Competitors in international markets</li> <li>• Product development in relation to market feasibility, such as expanding to other market segments</li> <li>• Legislation affecting the production and distribution of handicrafts, e.g. of environmentally friendly and fair trade products, labour laws</li> </ul>			

### 9.3 MAIN RESEARCH FINDING 3: THERE ARE FOUR AREAS OF *DESIGN FOR SUSTAINABILITY* THAT CAN ENSURE THE LONG-TERM VIABILITY OF HANDICRAFT COMMUNITIES AND ENTERPRISES: (I) PRODUCT DESIGN AND DEVELOPMENT, (II) DESIGN FOR MARKETING AND SALES, (III) PRODUCTION DEVELOPMENT AND (IV) KNOWLEDGE TRANSFER AND KNOWLEDGE DEVELOPMENT.

---

This section addresses research question 3: *What are potential areas of design for sustainability among the handicraft enterprises of northern Thailand?*

Various stakeholders are involved in the production and distribution of handicrafts. This research classifies them according to their roles as makers/handicraft communities, small- and medium-sized enterprises (SMEs), traders, distributors, buyers, supporters and investors. Handicraft communities and SMEs were identified as *core groups* in the production and distribution of handicrafts (Section 7.3.1).

This research found that **handicraft communities** (including artisans and their families in villages) usually work at home or in shared workspaces (e.g. the house of the group leader, a craft cottage or a cooperative building). They also have dealings with SMEs and large companies as part of the production process. **SMEs** primarily serve as job allocators or collectors of craftworks, producers of handicrafts and end-suppliers. They deal with a network of handicraft communities and factory-based companies for production. A number of owners of SMEs are the children of older artisans, or have lived in an area where handicraft production exists. **Designers** were identified as working with groups of SMEs, or large companies or with buyers, yet are less involved in handicraft communities (Section 7.3.1).

This means that there is an opportunity for designers to collaborate with handicraft communities, along with SMEs in rural areas to help ensure the long-term viability and sustainability of their production. This research identified four potential areas for design contribution, including:

- Product design and development;
- Design for marketing and sales;
- Production development;
- Knowledge transfer and knowledge development.

### 9.3.1 Product design and development

This became evident from information gathered from the literature review (Table 5.3(P3, P4)), the semi-structured interviews (Sections 7.2.2, 7.2.4) and the three case studies (Sections 8.1.2.2(D, E), 8.1.2.3, 8.2.3.1, 8.2.3.4, 8.3.1, 8.3.2).

Product design and development could help to increase product values (e.g. monetary value, customers' perceptions of handicrafts) and sales potential. This involves various activities, including: (i) identifying a particular type of product to sell to a small number of customers who want unique products (called a niche product/market), such as handmade clothing in a contemporary style for young adults (30s–40s), (ii) designing products to suit customers' lifestyles and ensure practical use, (iii) constantly refreshing the design of the products (e.g. in terms of colour schemes, forms and functions) to keep products up to date and suitable for the changing tastes of potential customers, (iv) engaging with product diversification and (v) using materials that are available locally. Even so, weaving communities and textile enterprises provided insights suggesting that these activities could offer only short-term benefits because there are alternative products on the market, especially mass-produced goods, which are trendy, available in greater quantity and affordable.

### 9.3.2 Design for marketing and sales

This emerged from the information gathered from the literature review (Table 5.3(P3, P4)), the semi-structured interviews (Sections 7.2.2, 7.2.4) and the three case studies (Sections 8.1.2.2(E), 8.1.2.3, 8.2.3.1, 8.2.3.4, 8.3.1, 8.3.2). It includes packaging design, the design of product information and communication channels and brand and identity design, which are addressed in relation to market feasibility.

*Specific to weaving communities and textile enterprises, potential areas include:*

- *Design of product information for sales purpose, e.g. product lists describing the features and qualities of handwoven textiles to distinguish them from textiles made by machine-based methods;*

- *Design of communication channels* – especially websites to connect weaving communities and textile enterprises with potential customers, e.g. teenagers and foreign customers;
- *Brand and identity design* – of weaving communities and textile enterprises, to enhance customers' understanding and recognition of local producers.

### 9.3.3 Production development

The research identifies potential areas for production development, including:

- The potential of the younger generation and the need for skills training;
- Management of raw material resources for handicraft production and material development;
- Production processes for handicrafts.

**The potential of the younger generation and the need for skills training** – was identified from the literature review (Tables 5.2(G9), 5.3(P4)), the semi-structured interviews (Sections 7.1.2(F), 7.2.4) and the three case studies (Sections 8.1.3.1, 8.2.1.3, 8.2.3.5, 8.3.1). There is a distinct lack of younger skilled people (ca.10s–20s) entering the workforce in handicraft production in the region. For the viability of handicraft production, it is necessary to encourage young people to get involved and to acquire the knowledge needed for handicraft production and enterprises. (This is explained further in Section 9.3.4).

**Management of raw material resources** for handicraft production and material development – was identified from information gathered from the literature review (Table 5.3(P4)), the semi-structured interviews (Sections 7.1.2(E), 7.3.2) and two case studies (Long and Mae Chaem districts, Sections 8.1.2.2(E), 8.2.3.1, 8.2.3.3). This is concerned with the issues of:

- A shortage of raw materials, i.e. natural resources in the rural areas;
- The inconsistent quality of raw materials used in production, which leads to non-standardized production and varying levels of quality.

*Specific to weaving communities and textile enterprises*, directions for development address with these issues might include, e.g.:

- Growing raw materials, i.e. cotton, in rural areas close to the weaving communities;
- Acquiring more information about the quality and specifications of raw materials and sourcing raw materials from reliable suppliers;
- Exploring other choices of materials for making handicrafts and for use in production processes.

**Production processes for handicrafts** – were identified from information gathered from the literature review (Table 5.3(P1, P4)) and the three case studies (Sections 8.1.1.1, 8.1.2.2, 8.2.3.1, 8.2.3.3, 8.3.1). The production processes for handicrafts at the community level were seen as in need of improvement, i.e. production standards and quality control, production capacity, and the development of original equipment and technology for production. These aspects, if addressed, could:

- Enhance the value of handicrafts, especially their positioning and pricing in the marketplace;
- Improve the reliability of handicraft producers in satisfying customer needs;
- Increase market competitiveness, e.g. through greater quantity and quality and product diversification.

Nevertheless, findings from the case studies revealed that production development would be dependent on whether group leaders and their weaving communities wished to pursue such a direction. In making such decisions, they usually take other factors into consideration, i.e. the ways of life, local traditions, the levels of skill of workers, trust and the long-term relationship between stakeholders. (This is explained further in Section 9.6).

#### **9.3.4 Knowledge transfer and knowledge development**

There is a need to transfer traditional knowledge and gain new knowledge – in order to ensure the long-term viability of the handicrafts sector.

Handicraft producers are in need of **new knowledge** for development in several areas, including technology, product design and development in relation to marketing, trading systems, foreign languages and sustainability. This was identified from information gathered

from the literature review (Table 5.3(P2, P3)), the semi-structured interviews (Sections 7.1.2, 7.2.1, 7.2.2, 7.2.3) and the three case studies (Sections 8.1.2.2, 8.1.2.3, 8.1.3.2, 8.2.3.4, 8.2.3.5, 8.3.2).

- *Technology* – is seen to include (i) production technologies (including standards and certification) and (ii) the use of computer software (e.g. for keeping accounts) and online services (i.e. websites for the dissemination and sale of goods to customers worldwide or for searching for information about textile products and potential markets).
- *Product design and development* – relates to *marketing*, especially the identification of potential customers (see 9.3.1 above).
- *Trading systems* – have to do with product distribution and channels reaching groups of potential customers, especially the younger generation and customers living abroad. Websites and online shopping were given as examples, but identified as an area where handicraft producers lacked understanding, especially in relation to trading procedures and regulations.
- *Foreign languages*, e.g. English and Chinese – is seen as beneficial for handicraft enterprises wishing to gain information and knowledge (e.g. about potential markets and customers, customer lifestyles and product design, production technologies and trade and distribution channels) and to seek market opportunities internationally.
- *Sustainability* (including *design for sustainability*) – is a subject which many stakeholders in the handicrafts sector did not understand well, especially in its deeper meaning, which comprises inter-dependant aspects of personal meaning, social responsibility, environmental care and economic viability. Even so, many of the practices in handicraft production actually conform to sustainability. This conformity needs to be addressed among the stakeholders to ensure its continuity and to promote the importance of handicrafts that align well with sustainability.

There is also a need to transfer **traditional knowledge** of handicraft production to the younger generation. This was identified from information gathered from the literature review



(Table 5.3(P3)) and the three case studies (Sections 8.1.3, 8.2.1.3, 8.2.3.5, 8.3.1, 8.3.2). Here, traditional knowledge refers to a range of knowledge areas such as: production (including materials, techniques and processes), products (including materials, forms and functions, patterns and colours) and the identity of ethnic groups in localities (characterised by, for example, the techniques they use and the features of what they make). These areas of traditional knowledge are in need of attention with respect to knowledge preservation, knowledge management and knowledge transfer, and this will require *repositories of information* and *a system* for knowledge transfer between skilled craftspeople and younger practitioners and also other stakeholders.

It is expected that there will be a loss of traditional knowledge, and in the case of the traditional weaving of ethnic groups this could happen in the next 20 to 30 years if this knowledge is not transferred. Challenges for the revitalization and transfer of weaving knowledge include (i) the lack of young people entering weaving communities, (ii) the current ageing workforce and (iii) the length of time it takes to transfer weaving knowledge. Mechanisms for the revitalization of weaving and knowledge transfer are discussed below.

#### **9.4 MAIN RESEARCH FINDING 4: WEAVING COURSES AND TRAINING ARE KEY MECHANISMS FOR TRANSFERRING TEXTILE KNOWLEDGE. YET THESE ARE NOT SUFFICIENTLY AVAILABLE, ESPECIALLY TO THE YOUNGER GENERATION.**

---

This finding emerged from information gathered from the three case studies (Sections 8.1.3, 8.2.1.3, 8.2.3.5, 8.3.1, 8.3.2). As mentioned above, there is a need to transfer the knowledge about traditional weaving of ethnic groups to the younger generation. At present, some information repositories exist in the sphere of handwoven textiles in the form of museums and handicraft centres, which display textile artworks and provide craft demonstrations and visitor guides – *on occasions*, along with books and handicrafts for sale. These are considered by many people in the region to be:

- *Inconvenient* for local weavers wishing to access information about weaving, because of irregular opening hours and restrictions on photography, for example;
- *Insufficient* in number, since building one of these repositories will require significant funding and involve various authorities;

- *Impractical* for transferring weaving knowledge, because much of this is tacit knowledge that is learned from *hands-on* training and experience over time, and is largely embedded in the practitioners themselves, as well as the fact that a large amount of tacit knowledge is not usually recorded in writing, while some goes beyond expression in words.

There is a need to develop a **system** that can help ensure the long-term viable future of the weaving communities and their ethnic textiles. Key activities in this system should involve (i) collecting and organizing information about traditional weaving and ethnic textiles, (ii) transferring traditional knowledge between skilled weavers/artisans and younger practitioners and (iii) revitalizing and promoting a textile culture (which is not limited to traditional culture). Various mechanisms were identified as being relevant for this, including:

- *Books* – that contain both textual and visual/photographic information about the textiles, i.e. the patterns of the ethnic groups in various localities, which weavers/practitioners can use for reference and for developing patterns;
- *Weaving courses and training* – that bring together skilled weavers/artisans and practitioners, i.e. the younger generation;
- *Knowledge centres* – that are accessible to various stakeholders and attract the younger generation, e.g. local libraries, coffee shops and gallery, textile shops and homestays;
- *Local events* – such as textile exhibitions, trade fairs and religious ceremonies, which also offer weaving demonstrations, as well as wedding ceremonies which involve traditional dress and theatre and cultural performances which can be related to textile production;
- *Websites and social media* – that provide archives of documents, photographs and videos with information about handwoven textiles;
- *Mass media* – for example magazines and local newspapers which can run articles about weaving communities in the area and documentary TV programmes.

Of these, **weaving courses and training** were identified (across the three case studies) as highly effective mechanisms that could connect various stakeholders and minimize knowledge gaps. However, this research found that these mechanisms are not sufficiently available to the younger generation. Usually, weaving is not included in academic degree courses. There are few places that offer in-depth training in weaving. In some places, weaving courses have been discontinued due to the departure of teachers who organized the courses, or the decision of school committees to replace a weaving course with a computer course, for example. Such decisions are understandable in terms of skills training relating to more recent demands from job markets. However, they also have a significant impact on the transfer of weaving knowledge and the erosion of cultural understanding among the younger generation.

Other issues were also addressed, including the content and management of courses, and finance to ensure long-term viability. This means that these subjects could be taught in weaving communities and textile enterprises. The group leaders did in fact point out that the training could be organized in their communities (e.g. in their houses/shops), depending on the availability of the group leaders and their potential customers (e.g. student groups, tourists with an interest in handicrafts and families with children).

This research also found that weaving courses could be developed to cover other aspects of textile production, for example, dyeing techniques (for yarns and fabrics), matching colour schemes, developing patterns (e.g. based on traditional patterns) and making tools for use in weaving.

#### **9.5 MAIN RESEARCH FINDING 5: DEVELOPMENTS IN THE HANDICRAFT COMMUNITIES LEAD IN ONE MAIN DIRECTION, NAMELY TOWARDS THE REVITALIZATION, PRESERVATION AND COMMERCIALIZATION OF HANDICRAFTS. IT IS CRUCIAL TO EXPLORE DIRECTIONS THAT CAN BETTER CONNECT HANDICRAFTS WITH THE YOUNGER GENERATION AND ENABLE PRODUCERS TO ADOPT A MORE ENTREPRENEURIAL APPROACH.**

---

Two strong attitudes with respect to the purposes of handicraft production emerged (in the literature review (Table 5.2(G7)), the semi-structured interviews (Section 7.1.2), and three case studies (Sections 8.1, 8.2, 8.3)).

- **Groups with Conservative Attitudes** tend to see handicraft production as part of a “traditional” culture with a long-term existence in relation to localities and as part of

the cultural heritage of Thailand. Craftspeople are expected to follow traditional ways (e.g. with respect to production techniques and processes, product forms and functions) in order to inherit traditional knowledge and craft skills and pass these on to the next generation, and to preserve the local identity of their craft communities for their traditional cultures to flourish in the future.

- **Groups with Commercial Attitudes** tend to see handicraft production as an activity that could offer an income for stakeholders such as makers, producers and traders. The commercialisation of handicrafts is usually driven by market demand in response to customer requirements, which often change and therefore require modifications in the traditional form of crafts as well as in their production processes in ways which give little regard to local traditions.

*In practice*, there are craftspeople who make handicrafts for **non-commercial purposes**, for example, to preserve and ensure a viable cultural future. Examples were given of craftspeople who make ornaments and motifs to decorate traditional buildings and spaces for religious events. These handicrafts are not for profit, but making them requires financial support and the collaboration of skilled craftspeople. On the other hand, there are groups of people who engage in handicraft production for **commercial purposes**. Their products fall into (i) traditional crafts, (ii) handicrafts that are based on traditional crafts, although altered in form and function and (iii) handicrafts which do not adhere closely to local traditions, but which may involve inherited craft skills in production or be inspired by traditional crafts. These variants potentially dilute the cultural significance of traditional crafts, even though they provide employment and income.

In the context of these two strong attitudes and their variants in practice, this research found that (i) almost all the projects implemented by the supporters group (such as government departments and craft associations) for the developments in handicraft communities had led in one main direction: “towards the revitalization and preservation of local traditions and handicrafts in ways that offer commercial activities and economic viability” (see the literature review, Table 5.2(G7)) and the three case studies (Sections 8.1.1.1, 8.2.1, 8.3.1). Also, there is a need (ii) to create directions that can better connect handicrafts with the younger

generation (Sections 8.1, 8.2, 8.3) and (iii) to enable handicraft producers to adopt a more entrepreneurial approach (Section 7.1.2) – to ensure their future viability.

**Design can help identify potential directions** for ensuring the future of handicraft producers – through exploring “the meaning of craft”, in relation to the younger generation. From this perspective, craft is *not limited to* local tradition and traditional culture. For example, craft could be explored in terms of (i) the process of making objects that are associated with the ways of life of the younger generation and (ii) skills development, especially cognitive<sup>2</sup> development among children (including their concentration, imagination and creativity, the ability to express original ideas, process information based on resources and personal meaning).

**Design can help to enable handicraft producers to adopt a more entrepreneurial approach** (Sections 7.1.2, 7.1.3) – for example, in product design and development in relation to marketing and sales, which could provide employment and income. This also includes attitudes for doing handicrafts more as a business (than as a hobby or supplementary activity), understanding the nature of change, development and uncertainty with their willingness to deal with it, and having commitment (i.e. the delivery of handiwork in due time). Having improved in these qualities could contribute to their business credibility and viability.

**9.6 MAIN RESEARCH FINDING 6: *CHOK* TEXTILES ARE AVAILABLE AT VARYING PRICES AND QUALITY IN THE MARKET. YET INFORMATION ABOUT THE PRODUCT QUALITY IS UNDERSTATED AND UNDIFFERENTIATED. MORE ADEQUATE INFORMATION ABOUT THE PRODUCT QUALITY (I.E. PRODUCTION TECHNIQUES AND PROCESSES) AS WELL AS ABOUT THE UNIQUE IDENTITY AND CULTURAL HERITAGE, ETHICAL PRODUCTION AND FAIR TRADE, IS REQUIRED TO STIMULATE PURCHASING DECISIONS.**

---

This finding emerged from information gathered from the case studies (Chapter 8). This research found that the weaving communities making *chok* textiles in Long and Mae Chaem districts have **different approaches to production development**.

The weaving communities making *chok* textiles in **Mae Chaem district** are opposed to developments in the traditional weaving process, specifically with regard to integrated

---

<sup>2</sup> **Cognitive development:** is about the ability to recognize, think and understand things.

techniques that have been developed to accelerate production for trade and income generation (Section 8.2.2.3). Instead, the weavers prefer to preserve and continue using the traditional process, which is rather complicated and time consuming. Their rationale relates to local ways of life, cultural heritage, spiritual meanings (attached to beliefs in Buddhism) and their historic pride in being weavers of fine textiles, especially for the royal family and aristocrats. The weavers in this area believe that the monetary value of handwoven textiles made by using the traditional process will continue to increase in the future and command a higher price than those made using integrated techniques (Section 8.2.3.2). This research found that this belief related to a core principle of finance, namely the time value of money<sup>3</sup> (TVM).

However, if traditional clothing becomes too expensive, only a few groups of people will be able to afford it (i.e. wealthy people or the weavers themselves) and they may not often wear it. This could eventually affect the popularity of traditional textile culture among a majority of people, and thus pose a threat to the continuation of the culture (Section 8.2.3.2).

The weaving communities producing *chok* textiles in **Long district**, on the other hand, introduced the “integrated techniques” that have been developed from traditional weaving but are still based mainly on handmade processes, and have also recently introduced “industrial-craft” methods in textile production (Section 8.1.2.2(C)). These weaving developments have been focused on increasing productivity and reducing production time in response to market demand, including from export markets (Section 8.1.1.1). Weavers in Long district have gradually become able to use the faster integrated techniques, while a few can still work with the traditional weaving process (Sections 8.1.1.1, 8.1.3.1). *Chok* textiles (made using the faster integrated techniques) have become available in greater quantities, and are sold at more affordable prices and therefore worn more widely, including by weavers, local buyers and customers further afield. Such developments have helped to revitalize and increase the popularity of traditional textile culture (Section 8.1.2.2 (E)).

---

<sup>3</sup> **Time Value of Money:** “The idea that money available at the present time is worth more than the same amount in the future due to its potential earning capacity. This core principle of finance holds that, provided money can earn interest, any amount of money is worth more the sooner it is received” (Investopedia US, 2015).

In the **marketplace**, *chok* textiles made by using different techniques and with different attributes were available in various price ranges. Yet information about these textiles was generally not made clear to customers (Section 8.1.2.2(E)). Without sufficient information, individual customers could not ascertain if the price of such products represented their actual value (Section 8.1.2.3). Purchasing decisions were based, for example, on pricing, the principles of fair trade and ethical production (i.e. for the original makers), the attributes of the textiles, production techniques and personal meaning (Section 8.1.2.3). To enable customers to make better purchasing decisions, there was a need to develop adequate information especially about product quality (i.e. production techniques and processes), weaving communities and their cultural heritage and unique identity (e.g. inherited skills in relation to ethnicity and identity and the meaning of handwoven textiles), ethical production, fair trade and prices. This information could also help the weaving communities to differentiate their products from those of other textile communities and industrial-craft producers.

## **9.7 MAIN RESEARCH FINDING 7: THE SUPPLY CHAIN OF HANDWOVEN TEXTILES IN THIS REGION FALLS INTO THREE MAIN CATEGORIES: STAKEHOLDERS, PRODUCERS' SERVICE AREAS AND TRADE CHANNELS.**

---

This emerged from information gathered from the case studies of Long (Section 8.1.2) and Mae Chaem (Section 8.2.3) districts. Their supply chain is made up of three main categories, as summarised in Table 9.5.

**Table 9.5 Three main categories in the supply chain of handwoven textiles**

<b>Stakeholders</b>	<b>Service areas</b> (by administrative division)	<b>Trade channels</b>
<p><b>Makers</b> – e.g. artisans who supply materials (e.g. hand-spun cotton yarns) to weavers, tailors, group leaders</p> <p><b>Producers/purchasers</b> – e.g. group leaders, local teachers, business owners, designers, government departments/officers</p> <p><b>Purchasers/traders</b> – e.g. artisans, group leaders, local teachers, tourists, market customers, business owners, designers, government departments/officers</p> <p><b>Purchasers/users</b> – e.g. all those mentioned above</p>	<p>Mainly for domestic trade</p> <p><b>From small to large divisions</b></p> <p>Villages (<i>moo</i>)</p> <p>Sub-districts (<i>tambon</i>)</p> <p>Districts (<i>amphoe</i>)</p> <p>Provinces</p> <p>Regions</p> <p>Thailand</p>	<p><b>Shops in rural localities</b>, including long-established and more recent shops under, for example, artisan ownership or contracts with shop owners, event organisers</p> <p><b>Local events</b>, including trade fairs, exhibitions and crafts demonstrations</p> <p><b>Homestay services</b> related to cultural tours, local events</p> <p><b>Websites</b></p>

**Stakeholders** in this supply chain can be broadly divided by their roles into (i) makers, (ii) producers/purchasers, (iii) purchasers/trader and (iv) purchasers/users. A stakeholder may have several roles, for example, a group leader may also be the owner of a local shop as well as a producer(/designer), buyer/trader.

People usually give the name of a **district as the source of original producers**, especially in the case of *chok* textiles. And within the district (comprising sub-districts and villages), there are several weaving communities and textile enterprises. For **production network**, a weaving community/textile enterprise may have dealings with other communities within the district as well as outside the district, including other districts in the same province, other provinces and other regions in Thailand. These communities usually have long-term relationships, and interact in areas such as jobs and income, skilled labour, raw materials for the production of handiwork.

Regarding the **production and distribution** of textile products *at the district level*, producers and individual customers can interact directly through local shops, local events related to



cultural tourism such as local festivals and trade fairs and homestay services. Individual customers can be divided into two broad groups (i) those living in the district, e.g. shop owners, teachers and government officers and (ii) those visiting to the district, e.g. tourists. In *areas beyond the district*, events, especially trade fairs and exhibitions with handicraft demonstrations, can connect local producers directly with individual customers. Websites are another channel which can connect local producers with various groups of customers. However, local producers are in need of skills development to enable them to use the internet and websites for commerce.

## **9.8 SUMMARY OF THE SEVEN MAIN RESEARCH FINDINGS**

---

The seven main research findings are recapitulated, as follows.

1. Handicraft production (including the weaving of the Tai Yuan ethnic group in northern Thailand) is compatible with all the elements in Walker's Quadruple Bottom Line of Sustainability (personal meaning, social responsibility, environmental care and economic viability).
2. Three handicrafts were found to have strong potential for *design for sustainability*, including textiles, furniture and jewellery. This is based on four critical factors affecting the long-term viability of handicraft enterprises, namely: production capacity, product viability, market feasibility and legislation.
3. There are four areas of *design for sustainability* that can ensure the long-term viability of handicraft communities and enterprises: (i) product design and development, (ii) design for marketing and sales, (iii) production development and (iv) knowledge transfer and knowledge development.
4. Weaving courses and training are key mechanisms for transferring textile knowledge. Yet these are not sufficiently available, especially to the younger generation.
5. Developments in the handicraft communities lead in one main direction, namely towards the revitalization, preservation and commercialization of handicrafts. It is crucial to explore directions that can better connect handicrafts with the younger generation and enable producers to adopt a more entrepreneurial approach.

6. *Chok* textiles are available at varying prices and quality in the market. Yet information about the product quality is understated and undifferentiated. More adequate information about the product quality (i.e. production techniques and processes) as well as about the unique identity and cultural heritage, ethical production and fair trade, is required to stimulate purchasing decisions.
7. The supply chain of handwoven textiles in this region falls into three main categories: stakeholders, producers' service areas and trade channels.

## **9.9 CONTRIBUTIONS TO KNOWLEDGE AND POTENTIAL BENEFICIARIES**

---

This section discusses this research in relation to (i) *original* contributions to knowledge, (ii) general contributions to knowledge and (iii) potential beneficiaries.

### **9.9.1 Original contributions to knowledge**

This research provides *original* contributions to knowledge, based on the case studies, and these are identified in relation to potential areas for design in the weaving communities that produce *chok* textiles in northern Thailand, to help ensure their long-term viability. The potential areas for design include:

- Designing training courses on handwoven textiles which can be made more widely available to offer knowledge transfer between groups such as experienced weavers and practitioners, especially the younger generation (addressed in main research finding 4);
- Exploring design in relation to the meaning of craft to determine directions which can better connect handicrafts with the younger generation and also enable producers to adopt a more entrepreneurial approach (addressed in main research finding 5);
- Information design for *chok* textiles that addresses the product quality (i.e. production techniques and processes), the unique identity and cultural heritage, ethical production and fair trade in order to stimulate purchasing decisions (addressed in main research finding 6).

### 9.9.2 General contributions to knowledge

Over the course of this research, findings were gradually validated through:

- *Two research papers* with peer reviewers that were published in conference proceedings and presented at international design conferences in Thailand (2012) and Japan (2013);
- *Visualizations of information and group discussions* with practitioners with experience in the fields of craft, design and manufacturing in Thailand and India (2013); and
- *A poster presentation* in a workshop about documenting and preserving indigenous languages in Thailand (2015).

Details on the validation of the research findings are provided in Section 1.2. These clearly demonstrate that this research has contributed to expanding the information about craft and *design for sustainability* available from international and local sources.

### 9.9.3 Potential beneficiaries

Potential beneficiaries of this research were identified from group discussions with 13 reviewers (six in Thailand, seven in India) and a group of nineteen undergraduate students in India (2013). Potential beneficiaries include:

- Artisans, handicraft communities and enterprises;
- Buyers and merchandizers of handicrafts;
- Designers, design researchers, design educators, design students;
- Project managers, business owners;
- Policymakers, strategic planners.

These stakeholders will benefit especially if they are involved in educational institutions, research institutions, government agencies or non-governmental organizations (NGOs) and companies.

## 9.10 LIMITATIONS OF THE RESEARCH AND FURTHER RESEARCH

---

This section discusses the limitations of this research in terms of (i) research scope and strategies, and data sources, (ii) the validity, reliability and generalizability of the research findings – all of which may significantly affect the research findings as a whole. These are followed by (iii) aspects of the research outcome and value thereof in wider implications.

### 9.10.1 Limitations of the research scope, research strategies and data sources

This research has covered the three areas of sustainability, design and craft, and focused on an area in which these come together in investigating the potential of *design for sustainability* in the handicrafts sector.

Thailand was reported to be one of ten developing countries which export art and craft goods to global markets (UNCTAD, 2010, p.141, data available to 2008) (Section 3.3.2). The handicrafts sector of northern Thailand was identified as a specific area for deeper investigation because:

- It is the strongest source of handmade production which is associated with the traditional practices of the people in this region, and there is a high density of small- and medium-sized enterprises (OSMEP, 2010) (Section 4.4);
- Handicraft production in this region has many features which are compatible with sustainability (Section 4.4);
- There was interest from the College of Arts, Media and Technology, Chiang Mai University, where the researcher works, in research into handicrafts in relation to education and community development.

Data collection included a literature review, semi-structured interviews and case studies. Clearly, there are limits to one researcher can achieve by working alone within the time constraints of a four-year Ph.D. course and with a very small budget.

The **literature review** was limited to material written in English and/or Thai. **Semi-structured interviews** were conducted with 26 informants (comprised three groups, i.e. producers (n=10), supporters (n=11) and buyers (n=5)). The buyers were the most difficult group to recruit for the interviews. They claimed to be very busy, or that they preferred not to be

involved in research activities. Two producers and two supporters provided information specific to the field of handicrafts that they were engaged in (rather than the handicrafts sector as a whole). All producers were unsure about the deeper meaning of the term “sustainability”. The **in-depth case studies** covered the weaving communities that produce *chok* textiles in Long and Mae Chaem districts in this region. These cases were selected on the basis of (i) an overview of the aspects of weaving communities that are compatible with sustainability, (ii) features of weaving communities that would allow the development of coherent case studies, (iii) permission being granted for the researcher to have access for data collection and (iv) their availability to participate in the research. Additionally, a company running weaving courses and training in Bangkok was investigated as a supplementary case.

### **9.10.2 Limitations regarding the validity, reliability and generalizability of the research findings**

In the context of qualitative research, for someone to claim that research findings are generalizable, agreement over the validity and reliability of the findings must be reached by neutral observers (Evans, 2010, p.286; Writing@CSU, 1993). The meanings of validity, reliability and generalizability are briefly explained as follows.

- **Validity** is concerned with “how much value we should attach to our [research] findings” (Hall and Hall, 1996, p.43), especially, the extent to which a research finding is “[interpreted] accurately and represents the social phenomena to which it refers” (Hammersley, 1990, p.57 cited in Evans, 2010, p.286).
- **Reliability** is concerned with “the repeatability of a particular set of research findings” (Association for Qualitative Research, 2013), such as research procedures and tools (Writing@CSU, 1993), and to what extent these instances would yield the same results if assigned to “the same category” by different researchers or by the same researcher on different occasions (Hammersley, 1992, p.67 cited in Evans, 2010, p.286).
- **Generalizability** in qualitative research refers to the extent to which theory developed within one study may be exported ... to provide explanatory theory for the experiences of other individuals who are in comparable *situations*” (Horsburgh, 2003,

p.311). It is concerned with logical statements that are true in most *situations* (generalizations) (Popay et al., 1998 cited in Horsburgh, 2003, p.311).

According to the European Commission (2011, pp.2, 5, 7) and its framework for research careers, four broad profiles of researchers are identified with different levels of competence and scope of responsibility, including (i) first stage researcher (doctoral training stage), (ii) recognised researcher (post-doctoral stage), (iii) established researcher (independent research stage) and (iv) leading researchers. This research is at the first stage of doctoral training. The researcher is required to (i) carry out the research under supervision, (ii) develop the research methodology, (iii) analyse, evaluate and synthesis complex ideas, and (iv) demonstrate a good understanding of the field of study and produce information and knowledge.

The research **included** validation of aspects of the research findings from the literature review (Chapter 4), the semi-structured interviews (Chapter 7) and the main research findings (Chapter 9). It did **not include** (i) validation of the findings from case studies (Chapter 8), although the researcher is invited to write a book chapter based on aspects of these findings for a book launch in 2016 or (ii) the reliability and generalizability of particular set(s) of research findings because these go beyond the scope of this Ph.D. thesis and a current level of experience and competency of the researcher. Nevertheless, peer reviewers addressed aspects of the research outcome and value thereof in terms of the potential wider implications of further research.

### **9.10.3 Aspects of the research outcome and value thereof in wider implications**

*The research methodology* (Chapter 6) and *aspects of the main research findings* (Chapter 9) could be applicable more widely as part of further research in relation to craft and design for sustainability in other cultural groups at the national and international levels, e.g. Thailand, Sri Lanka, Indonesia, Japan and other countries in Africa. Especially, aspects of the main research findings could be further developed as guidelines/frameworks/tools for researchers. These research propositions, if tested via several cases and the data collection and analysis show to be more generalizably valid and yield a similar set of results, could lead to theory building in the future.

Additionally, *emerging issues* related to the importance and values of handicraft production could be further investigated across various groups of people at the national and international levels, especially in the context of international trade. Various value indicators with different methods of measurement should be taken into consideration, for example:

- Economic value – via Gross Domestic Product (GPD) and export intensities, the principles of sufficient economy;
- Human and social value – via Gross National Happiness (GNH), social return on investment (SROI) (SROI Network, 2012);
- Knowledge value, technological value and strategic value – via intellectual property and patents (Fraunhofer Institute for Systems and Innovation Research, 2010, pp.9–18);
- Product value (i.e. its qualities/characteristics/reputation) in relation to its original place of production – via geographical indication (GI) (World Intellectual Property Organization (WIPO), 2015).

## **9.11 CONCLUDING REMARKS**

---

From this investigation into the potential areas of *design for sustainability* in the handicrafts of northern Thailand, it is clear that handicraft production at the local level is compatible with all the elements in Walker's Quadruple Bottom Line of Sustainability (personal meaning, social responsibility, environmental care, economic viability) (Walker, 2011).

Ironically, the craftspeople and their traditional way of making handicrafts such as ethnic textiles, which demonstrate all these elements of sustainability, have significantly declined in number. In fact, information from both the literature review and the field research suggested that the situation is similar in all regions of Thailand. This is a result, for example, of (i) the loss of experienced workers as they grow older, while their knowledge has not been adequately transferred to the younger generation, (ii) the migration of craftspeople to urban areas for jobs that could provide a better income and the attractions of modern life in urban areas and (iii) the increase in the number and choice of mass-produced goods from factories which are available at affordable prices in the marketplace. The phenomena of urban

migration and mass production do *not* fully conform to all the elements of sustainability, and are driven by economic priorities that often involve short-term benefits.

The fact that the traditional practices of craftspeople are in decline does *not* mean that handicrafts cannot be sustained or is unsustainable. The traditional practices of craftspeople are subject to upward and downward cycles. However, the qualities that make them compatible with all the elements of sustainability remain and can be carried on into the future. It is vital to understand that the concept embodied in terms such as “sustain” and “sustainability” as used in this research includes personal meaning, social responsibility, environmental care and economic viability (Walker, 2011). It thus has a much deeper meaning than what is usually offered in a dictionary definition (to mean, i.e. sustaining/maintaining, continuance and continuity in the long term).

Sustainability is a global agenda of the twenty-first century (Agenda 21) for change in human activities and a move towards more responsible ways of living. In response to this global agenda, the traditional knowledge and practices of craftspeople, which are compatible with all the elements of sustainability, will necessarily be strengthened and carried on into the future, and should be promoted more widely at the individual and local levels, including many regions in Thailand and other countries worldwide.

One significant aspect of handicraft production in Thailand is that it is part of the social foundation that supports and benefits various activities such as social development, socio-economic development, tourism, Thai arts and design and manufacturing. It represents traditional culture, cultural heritage and national identity – all of which contribute to the soft power of Thailand. This is very apparent, yet it cannot be simply measured, for example, in economic terms. It goes beyond monetary value. If this kind of soft power were to vanish, Thailand would lose a key advantage in terms of national identity. To ensure the long-term viability of handicraft production in Thailand in ways compatible with sustainability, it is strongly recommended that designers:

- Collaborate with handicraft communities and small-sized handicraft enterprises in rural areas;



- Investigate the three product categories that have potential in relation to *design for sustainability*, namely (i) handwoven textiles and garments, (ii) furniture made of wood and fibrous plants and (iii) silver jewellery and costume jewellery;
- Engage with handicraft producers in relation to (i) product design and development, (ii) design for marketing and sales (including packaging design, the design of product information and communication channels and brand and identity design), (iii) production development (in areas such as the identification of skills levels, material development and process improvement) and (iv) knowledge transfer (especially traditional knowledge in making handicrafts) and knowledge development (especially in the areas of technology, design and marketing, trading systems, foreign languages and sustainability);
- Explore directions that can better connect handicrafts with the younger generation;
- Help handicraft producers to adopt a more entrepreneurial approach.

# References

- Adamson, G. (2007) *Thinking Through Craft*, Berg, Oxford.
- Adamson, G. (2010) *The Craft Reader*, Berg, Oxford.
- Alfoldy, S. (2007) *NeoCraft: Modernity and the Crafts*, The Press of the Nova Scotia College of Art and Design, Nova Scotia.
- Alibaba.com (1999) e-Commerce for small business. Available at: <http://www.alibaba.com/>, accessed 16 August 2011.
- Anonymous. (ca.2010) A study of the propriety in founding the National Craft Council of Thailand. Report in: SACICT, Ayutthaya. Available in Thai language at: [http://www.sacict.net/upload/6\\_chapter%202.pdf](http://www.sacict.net/upload/6_chapter%202.pdf), accessed 30 July 2011.
- Association for Qualitative Research, The. [AOR]. (2013) Qualitative research glossary. St Neots. Available at: <http://www.aqr.org.uk/glossary/>, accessed 13 September 2014.
- Association for the Promotion of Traditional Craft Industries. (2009) Japan Traditional Craft Centre. Available at: <http://kougeihin.jp/en/top>, accessed 26 April 2011.
- Association of Southeast Asian Nations Secretariat. [ASEAN Secretariat]. (2011) *Directory of Outstanding ASEAN SMEs 2011*, ASEAN Secretariat, Jakarta. Available at: <http://www.asean.org/resources/item/directory-of-outstanding-asean-smes-2011-2>, accessed 27 October 2014.
- Association of Southeast Asian Nations Secretariat. [ASEAN Secretariat]. (2014a) ASEAN: About ASEAN. Section in: ASEAN Secretariat, Jakarta. Available at: <http://www.asean.org/asean/about-asean/overview>, accessed 6 May 2014.
- Association of Southeast Asian Nations Secretariat. [ASEAN Secretariat]. (2014b) Communities: ASEAN Economic Community. Section in: ASEAN Secretariat, Jakarta. Available at: <http://www.asean.org/communities/asean-economic-community>, accessed 6 May 2014.
- Bank of Thailand. [BOT]. (2015) Bangkok. Available at: <http://www.bot.or.th/>.
- Barker, C. (2005) *Cultural Studies: Theory and Practice*. Sage. London.
- Bassett, P. (2010) *New Directions in Thai Materials*, Serindia Publications, Chicago.
- Bhamra, T. and Lofthouse, V. (2007) *Design for Sustainability: A Practical Approach*, Gower Publishing, Surrey.
- Bilz, H. (1998) *Erzgebirgische Volkskunst: Popular Arts and Crafts from the Erzgebirge Mountains*, Ingo Beer Verlag.
- Botnick, K. and Raja, I. (2011) "Subtle technology: the design innovation of Indian artisanship". In: *Design Issues*, Massachusetts Institute of Technology, Massachusetts, Vol.27, No.4, pp.43-55.
- Bowie, A. K. (1992) "Unraveling the myth of the subsistence economy: textile production in nineteenth-century northern Thailand". In: *The Journal of Asian Studies*, Association for Asian Studies, Vol.51, No.4, pp.797-823.
- Braverman, H. (1974) "Labor and monopoly capitalism: the degradation of work in the twentieth century". In: Adamson, G. (2010), ed. *The Craft Reader*, Berg, Oxford, pp.78-82.
- Bulsara, C. (2011) Using a mixed methods approach to enhance and validate your research. Teaching material in: Institute for Health Research, University of Notre Dame Australia. Available at: <http://www.nd.edu.au/research/ihr/events.shtml>, accessed 27 October 2014.
- Busch, V. O. (2010) "Exploring net political craft: from collective to connective". In: Niedderer, K. and Townsend, K. (2010), eds. *Craft Research*, Intellect, Bristol, Vol.1, No.1, pp.113-124.
- Cadman, M. D. (2009) Developing sustainability in the design and construction process. Thesis (Ph.D.) in: Lancaster University, Lancaster.
- Cambridge Dictionaries Online. (2013) Available at: <http://dictionary.cambridge.org/>, accessed 2012-2013.

- Castree, N., Kitchin, R. and Rogers, A. (2013) *A Dictionary of Human Geography*, Oxford University Press, Oxford. Available at: <http://www.oxfordreference.com.ezproxy.lancs.ac.uk/view/10.1093/acref/9780199599868.001.0001/acref-9780199599868-e-775?rskey=gHhFls&result=2>, accessed 27 June 2015.
- Chaipattana Foundation, The. (2013) Bangkok. Available at: [http://www.chaipat.or.th/chaipat\\_english/index.php?option=com\\_content&view=article&id=4103&Itemid=293](http://www.chaipat.or.th/chaipat_english/index.php?option=com_content&view=article&id=4103&Itemid=293), accessed 15 October 2013.
- ChangSipmu.com. (2009) Maehongson. Available in Thai and English languages at: [http://changsipmu.com/eng/eng\\_index.html](http://changsipmu.com/eng/eng_index.html), accessed 14 November 2011.
- Charoenmuang, D. (2007) *Sustainable Cities in Chiang Mai: A Case of a City in a Valley*, Social Research Institute, Chiang Mai University, Chiang Mai.
- Chattopadhyay, K. (1963) "Indian handicrafts". In: Adamson, G. (2010), ed. *The Craft Reader*, Berg, Oxford, pp.192-198.
- Cheesman, L. (2012) In: inquiries with experts conducted by the researcher, Studio Naenna, Chiang Mai.
- ChristKindl-Markt. (2007) The German Christmas Market, Shippensburg. Available at: [www.christkindl-markt.com](http://www.christkindl-markt.com), accessed 23 March 2012.
- Chudasri, D., Walker, S. and Evans, M. (2012) "An overview of the issues facing the craft industry and the potential for design: with a case study in upper northern Thailand". In: *Design Research Society 2012: Bangkok, Conference Proceedings*, Chulalongkorn University, Bangkok, Vol.1, pp.314-326.
- Chudasri, D., Walker, S. and Evans, M. (2013) "Directions for design contributions to the sustainable development of the handicrafts sector in northern Thailand". In: *Consilience and Innovation in Design: Proceedings and Program, The 5th IASDR 2013 Tokyo*, Shibaura Institute of Technology, Tokyo, Vol.2, pp.585-596.
- Clark, J. (2000) "Beyond empathy: An ethnography approach to cross-cultural social work practice". Available at: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.110.538&rep=rep1&type=pdf>, accessed 1 September 2012.
- Clark, H. and Brody, E. D. (2009) *Design Studies: A Reader*, Oxford, Berg.
- Cohen, E. (2000) *The Commercialized Crafts of Thailand: Hill Tribes and Lowland Villages: Collected Articles*, Curzon Press, Richmond.
- Computer Hope. (ca.2013) When was the first computer invented? Available at: <http://www.computerhope.com/issues/ch000984.htm>, accessed 25 April 2013.
- Craft Central. (ca.2009) Industry overview. Available at: <http://www.craftcentral.com/craft-industry.html>, accessed 4 November 2011.
- Craft Revival Trust. et al. (2005) *Designers Meet Artisans: A Practical Guide*, Grass Root Publications, New Delhi. Available at: <http://www.craftrevival.org/productdetails.asp?ItemCode=P0001>, accessed 15 March 2012.
- Crafts Council. (2011) Lab craft: digital adventures in contemporary craft, London. Available at: <http://www.labcraft.org.uk/>, accessed 4 November 2011.
- David Mellor. (2012) Sheffield. Available at: <http://www.davidmellordesign.com/>, accessed 23 March 2012.
- Dedon. (1991) Available at: [www.dedon.de](http://www.dedon.de), accessed 26 February 2012.
- Department of Fine Arts. (2006) Samnak Chang Sip Moo [The Bureau of Ten Craftsmanship]. In: The group of management development, Bangkok. Available in Thai language at: <http://www.finearts-psdg.com/n/tabid/60/Default.aspx>, accessed 14 November 2011.
- Department of Industrial Promotion. [DIP]. (1999a) *Thai Handicraft Products*, Ministry of Industry, Bangkok. Available at: <http://library.dip.go.th/multim1/ebook/IH%20%E0%B8%81%E0%B8%AA%E0%B8%AD15E.pdf>, accessed 26 July 2011.
- Department of Industrial Promotion. [DIP]. (1999b) *The Quality and Diversity of Thailand's Handicraft Products*, Ministry of Industry, Bangkok. Available at: <http://library.dip.go.th/multim1/ebook/IH%20%E0%B8%81%E0%B8%AA%E0%B8%AD60%20Q9.pdf>, accessed 26 July 2011.

- Department of Intellectual Property. [DIP]. (2010) IP system of Thailand: geographical indications. In: Ministry of Commerce, Nonthaburi. Available in Thai and English languages at: <http://www.ipthailand.go.th/>, accessed 7 May 2014.
- Department of Intellectual Property. [DIP]. (2010) Announcement for the registration of geographical indication: Lamphun Brocade Thai Silk. In: Ministry of Commerce, Nonthaburi. Available in Thai language at: [http://www.ipthailand.go.th/en/index.php?option=com\\_docman&task=cat\\_view&gid=237&limit=20&limitstart=0&order=hits&dir=DESC&Itemid=434](http://www.ipthailand.go.th/en/index.php?option=com_docman&task=cat_view&gid=237&limit=20&limitstart=0&order=hits&dir=DESC&Itemid=434), accessed 7 May 2014.
- Department of International Trade Promotion. [DITP]. (2012) Thai trade fair. In: Ministry of Commerce, Nonthaburi. Available at: <http://www.thaitradefair.com/>, accessed 7 February 2012.
- Dormer, P. (1997) *The Culture of Craft: Status and Future*, Manchester University Press, Manchester.
- Dresner, S. (ed.2008, 1st ed.2002) *The Principles of Sustainability*, Earthscan, London.
- Economist, The. (2009) "The Triple Bottom Line". In: *The Economist*, London, 17th November 2009. Available at: <http://www.economist.com/node/14301663>, accessed 2 April 2013.
- Elkington, J. (ed.1999, 1st ed.1997) *Cannibals with Forks: The Triple Bottom Line of 21st Century Business*, Capstone, Oxford.
- Elkington, J. (2004) "Enter The Triple Bottom Line". In: Henriques, A. and Richardson, J. (2004), eds. *The Triple Bottom Line, Does It All Add Up?: Assessing the Sustainability of Business and CSR*, Earthscan, London, pp.1-16.
- Ermenegildo Zegna Group. (2001) Available at: <http://www.zegnagroup.it/>, accessed 16 March 2012.
- Erzgebirge Palace. (2006) Available at: <http://www.erzgebirgepalace.com/>, accessed 23 March 2012.
- European Commission. (2011) Towards a European framework for research careers. Policy in: European Commission. Available at: [http://ec.europa.eu/euraxess/pdf/research\\_policies/Towards\\_a\\_European\\_Framework\\_for\\_Research\\_Careers\\_final.pdf](http://ec.europa.eu/euraxess/pdf/research_policies/Towards_a_European_Framework_for_Research_Careers_final.pdf), accessed 27 June 2015.
- European Conference on Crafts and Small Enterprises. (1994) *Craft and Small Enterprises: The Key to Growth, Employment and Innovation: Proceedings of the Berlin Conference*, Office for Official Publications of the European Communities, Luxembourg.
- European Conference on Crafts and Small Enterprises. (1997) *Employment Through Innovation: Preparing Milan: Third European Conference of Crafts and Small Businesses*, Office for Official Publications of the European Communities, Luxembourg.
- Evans, M. (2010) Design futures: an investigation into the role of futures thinking in design. Thesis (Ph.D.) in: Lancaster University, Lancaster.
- Fine, A. G. (2003) "Crafting authenticity: the validation of identity in self-taught art". In: *Theory and Society*, Kluwer Academic Publishers, Vol.32, No.2, pp.153-180.
- Foster's Imports. (2012) Available at: <http://www.handcraftedgermangifts.com/info.html>, accessed 23 March 2012.
- Fraunhofer Institute for Systems and Innovation Research. (2010) *The Value and Indicator Function of Patents*, Expertenkommission Forschung und Innovation (EFI), Berlin.
- Garbie, H. I. (2013) "DFSME: design for sustainable manufacturing enterprises (an economic viewpoint)". In: *International Journal of Production Research*, Taylor and Francis, London, Vol.51, No.2, pp.479-503.
- Graham, M. (2013) "Thai Silk Dot Com: authenticity, altruism, modernity and markets in the Thai silk industry". In: *Globalizations*, Taylor and Francis, Vol.10, No.2, pp.211-230. Available at: <http://dx.doi.org/10.1080/14747731.2013.786224>, accessed 29 October 2013.
- Hall, D. and Hall, I. (1996) *Practical Social Research: Project Work in the Community*, Macmillan Press, London.
- Harrod, T. (1997) *Obscure Objects of Desire: Reviewing the Crafts in the Twentieth Century*, University of East Anglia.
- Horsburgh, D. (2003) "Evaluation of qualitative research". In: *Journal of Clinical Nursing*, Blackwell Publishing, Vol.12, pp.307-312.

- Howkins, J. (2010) *Thailand's national strategy on creative economy: developing Thailand's creative economy*, NESDB and UNDP, Bangkok.
- Humphreys, R. (1999) "Skilled craftswomen or cheap labour? Craft-based NGO projects as an alternative to female urban migration in northern Thailand". In: *Gender and Development*, 7:2, pp.56-63.
- Hunter, M. (2010) What design is and why it matters. Opinion in: Design Council, London. Available at: <http://www.designcouncil.org.uk/about-design/What-design-is-and-why-it-matters/>, accessed 31 October 2011.
- Ihatsu, A. (1997) "Craft, art or design? In pursuit of the changing concept of 'craft' ". In: Harrod, T. (1997), ed. *Obscure Objects of Desire: Reviewing the Crafts in the Twentieth Century Conference*, University of East Anglia, pp.300-306.
- Investopedia US. (2013) Definition of Gross Domestic Product – GDP. Available at: <http://www.investopedia.com/terms/g/gdp.asp>, accessed 11 September 2013.
- Jackson, T. (2006) *The Earthscan Reader in Sustainable Consumption*, Earthscan, London.
- Jacobs, E. (2012) An inuit builder crafts his last canoe. News in: NPR, Washington, D.C. Available at: <http://www.npr.org/2012/03/05/147728906/an-inuit-builder-crafts-his-last-canoe>, accessed 18 March 2012.
- Jim Thompson Farm. (2009) Nakhon Ratchasima. Available in Thai language at: [www.jimthompsonfarm.com](http://www.jimthompsonfarm.com), accessed 25 February 2012.
- Jim Thompson: The Thai Silk Company (2009) Bangkok. Available at: [www.jimthompson.com](http://www.jimthompson.com), accessed 25 February 2012.
- Jongeward, C. (2001) "Alternative entrepreneurship in Thailand: weavers and the northeastern handicraft and women's development network". In: *Convergence*, International Council for Adult Education, Vol.34, No.1, pp.83-96.
- Jonsson, L. (2007) "Rethinking dichotomies: crafts and the digital". In: Alfoldy, S. (2007), ed. *NeoCraft: Modernity and the Crafts*, The Press of the Nova Scotia College of Art and Design, Nova Scotia, pp.240-248.
- Lannaworld.com. (2006) History of Lanna, Chiang Mai. Available in Thai language at: <http://www.lannaworld.com/history/lannahist.htm>, accessed 24 June 2011.
- Longdo Dict. (2003) Bangkok. Available at: <http://dict.longdo.com/>, accessed 2011-2014.
- Longman. (2013) Dictionary of contemporary English. Available at: <http://www.ldoceonline.com/>, accessed 2012-2013.
- Lucie-Smith, E. (1981) *The Story of Craft: The Craftsman's Role in Society*, Oxford England, Phaidon.
- Macmillan Dictionary. (2009–2015) Macmillan Publishers. Available at: <http://www.macmillandictionary.com/>, accessed 2011-2014.
- Matchon. (2011) "Special report: investigating the 5-years result of creative economy (2006–2009): growth 10.6% per annual". In: *Matchon Weekly*, Matchon, Bangkok, Year.31, No.1617, p.101. Available in Thai language at: <http://info.matchon.co.th/weekly/>, accessed 16 August 2011.
- McIntosh, S. D. (2012) "Tai Yuan textiles of Thailand". In: *Textiles Asia Journal*, Hong Kong, Vol.4, No.2, pp.3-9.
- Meadows, D., Jorgen, R. and Meadows, D. (ed.2005, 1st ed.1972) *The Limits to Growth: The 30-Year Update*, Earthscan, London.
- Melles, G., De Vere, I. and Misis, V. (2011) "Socially responsible design: thinking beyond The Triple Bottom Line to socially responsive and sustainable product design". In: *CoDesign: International Journal of CoCreation in Design and the Arts*, Taylor and Francis, London, Vol.7, No.3-4, pp.143-154.
- Mellor, C. (2012) In: MadeNorth Conference 2012, Liverpool.
- Merriam, B. S. (2009) "Qualitative case study research". In: *Qualitative Research: A Guide to Design and Implementation; Revised and Expanded from Qualitative Research and Case Study Applications in Education*, Wiley Imprint, San Francisco, pp.39-54. Available at: <http://cgi.stanford.edu/~dept-ctl/tomprof/posting.php?ID=1013>, accessed 11 September 2014.

- Metcalfe, B. (1993) "Replacing the myth of modernism". In: Alföldy, S. (2007), ed. *NeoCraft: Modernity and the Crafts*, The Press of the Nova Scotia College of Art and Design, Nova Scotia, pp.4-32.
- Miller, R. (2007) Erzgebirge Germany: home to Christmas ornaments. In: ChristKindl-Markt: The German Christmas Market, Shippensburg. Available at: <http://www.christkindl-markt.com/erzgebirge-germany-home-christmas-ornaments-a-12.html>, accessed 23 March 2012.
- Mind Tools Ltd., (1996) Plus, minus, interesting: weighing the pros and cons of a decision. Available at: [http://www.mindtools.com/pages/article/newTED\\_05.htm](http://www.mindtools.com/pages/article/newTED_05.htm), accessed 7 September 2012.
- Ministry of Culture. (2009) Seminar of progressing from the cultural capital to the creative economy, Bangkok. Available in Thai language.
- Mohanty, F. G. (1990) "From craft to industry: textile production in the United States", *Material History Bulletin*, Vol.31, pp.23-31.
- Monash University. (2003) Discuss your methodology. Learning material in: Learning support for higher degree research students. Available at: <http://www.monash.edu.au/lls/hdr/write/5.6.html>, accessed 15 September 2014.
- Montagna, J. (1981) The Industrial Revolution. Teaching material in: Yale-New Haven Teachers Institute. Available at: <http://www.yale.edu/ynhti/curriculum/units/1981/2/81.02.06.x.html>, accessed 27 April 2013.
- Morris, W. (1888) "The revival of handicraft". In: Adamson, G. (2010), ed. *The Craft Reader*, Berg, Oxford, pp.146-155.
- Muthesius, S. (1998) "Handwerk/ Kunsthandwerk". In: Adamson, G. (2010), ed. *The Craft Reader*, Berg, Oxford, pp.120-132.
- Nair, C. (2011) *Consumptionomics: Asia's Role in Reshaping Capitalism and Saving the Planet*, Oxford: Infinite Ideas.
- Neidderer, K. and Townsend, K. (2010) "Editorial: craft research and its context". In: *Craft Research*, Intellect, Bristol, Vol.1, No.1, pp.3-10.
- NESDB. [Office of the National Economic and Social Development Board]. (2008) *The National Economic and Social Development Plan*, NESDB, Bangkok. Available at: <http://eng.nesdb.go.th/>, accessed 15 October 2013.
- NESDB. [Office of the National Economic and Social Development Board]. (2011) *National income of Thailand 2009*, NESDB, Bangkok. Available at: <http://www.nesdb.go.th/Default.aspx?tabid=94>, accessed 24 January 2011.
- NOHMEX. [Northern Handicrafts Manufacturers and Exporters Association]. (2009) Chiang Mai. Available at: <http://www.nohmex.com/>, accessed 25 July 2011.
- Nugraha, A. (2012) *Transforming Tradition: A Method for Maintaining Tradition in a Craft and Design Context*, Aalto University, Helsinki.
- Orr, D. (2003) Four challenges of sustainability. Teaching material in: University of Vermont, Burlington. Available at: [http://sites.duke.edu/trillium/files/2012/05/Readings\\_Orr4Challenges.pdf](http://sites.duke.edu/trillium/files/2012/05/Readings_Orr4Challenges.pdf), accessed 6 June 2013.
- OSMEP. [Office of Small and Medium Enterprises Promotion]. (2009) *White Paper on SMEs 2008 and Trends 2009*, OSMEP, Bangkok. Available at: <http://eng.sme.go.th/>, accessed 25 June 2011.
- OSMEP. [Office of Small and Medium Enterprises Promotion]. (2010) *The Status of SMEs in Thailand: The Role Related to Economic, Social and Cultural Aspects*, OSMEP, Bangkok. Available in Thai language at: <http://www.sme.go.th/>, accessed 25 June 2011.
- Oxford English Dictionaries. [OED]. (2013, 2015) Oxford University Press, Oxford. Available at: <http://www.oed.com/>.
- Papanek, V. (ed.1985, 1st ed.1971) *Design for the Real World: Human Ecology and Social Change*, Thames and Hudson, London.
- Peleggi, M. (1996) "National heritage and global tourism in Thailand". In: *Annals of Tourism Research*, Elsevier Science, Vol.23, No.2, pp.432-448.
- Poggenpohl, S.H. (ca.2015) "Constructing knowledge of design, part 2: Questions – an approach to design research". Available at: [http://dartevents.org/questions\\_files/Poggenpohl.pdf](http://dartevents.org/questions_files/Poggenpohl.pdf), accessed 3 January 2015.

- Pratruangkrai, P. (2012) "Greater push for handicraft exports". In: *The Nation*, Bangkok, 29 October 2012. Available at: <http://www.nationmultimedia.com/business/Greater-push-for-handicraft-exports-30193168.html>, accessed 15 October 2013.
- Press, M. (2007) "Handmade futures: the emerging role of craft knowledge in our digital culture". In: Alfoldy, S. (2007), ed. *NeoCraft: Modernity and the Crafts*, The Press of the Nova Scotia College of Art and Design, Nova Scotia, pp.249-265.
- Roworth-Stokes, S. (2012) "Design case studies: never let the facts get in the way of a good story!" In: *Proceedings of Design Research Society 2012 Conference*, Chulalongkorn University, Bangkok, Vol.4, pp.1629-1645.
- Royal Institute, The. (2007) Royal Institute Dictionary, Bangkok. Available at: <http://www.royin.go.th/>, accessed 11 July 2013.
- Ryalie, S. (2009) Creative economy: opportunities and challenges for Thailand. Report in: Creative Thailand, TCDC, Bangkok. Available at: <http://www.creativethailand.org/en/resource/report.php>, accessed 30 August 2011.
- SACICT. [The Support Arts and Crafts International Centre of Thailand, Public Organization]. (2011) *Living Thailand*, SACICT, Ayutthaya, Year.2011, No.5. Available in Thai and English languages at: <http://sacict.net/flipbook/livingthai/?nPage=2>.
- SACICT. [The Support Arts and Crafts International Centre of Thailand, Public Organization]. (2012) Thai Navatasilp: innovative art of Thai craft. Leaflet in: Bangkok International Fair for Gifts and Houseware (BIG+BIH) 2012 (October).
- Saul, R. J. (2005) *The Collapse of Globalism and the Reinvention of the World*, Atlantic Books, London.
- Schumacher, E. F. (ed.1993, 1st ed.1973) *Small is Beautiful: A Study of Economics as if People Mattered*, Vintage.
- Schumacher, E. F. (1979) *Good Work*, Jonathan Cape, London.
- Scott, J. (2014) *A Dictionary of Sociology (4 ed.)*, Oxford University Press, Oxford. Available at: <http://www.oxfordreference.com.ezproxy.lancs.ac.uk/view/10.1093/acref/9780199683581.001.0001/acref-9780199683581-e-957?rskey=gHhFis&result=5>, accessed 27 June 2015.
- Scruton, R. (2012) *Green Philosophy: How to Think Seriously About the Planet*, Atlantic Books, London.
- Shiner, L. (2007) "The fate of craft". In: Alfoldy, S. (2007), ed. *NeoCraft: Modernity and the Crafts*, The Press of the Nova Scotia College of Art and Design, Nova Scotia, pp.33-46.
- Siamstamp. (2003) Available at: [www.siamstamp.com](http://www.siamstamp.com), accessed 15 October 2013.
- Sjoberg, G. (1955) "The preindustrial city". In: *American Journal of Sociology*, Vol.60, No.5, pp.438-445. Available at: <http://www.jstor.org/>, accessed 26 April 2013.
- SROI Network. (2012) A Guide to Social Return on Investment. A document in: Social Value UK. Available at: <http://socialvalueuk.org/what-is-sroi/the-sroi-guide>, accessed 25 June 2015.
- Suchitta, P. (1989) "Mental template: the case of the Tai Lao Pha Sin". In: *Asian Folklore Studies*, Vol.48, pp.95-105.
- Suriya, K. et al. (2007) *Souvenir Development Project: Analysis and Development of Products and Tourism Services for Small and Medium Enterprises and Community Enterprises in Lanna*, SRI-CMU, Chiang Mai. Available in Thai language.
- TCDC. [Thailand Creative and Design Center]. (2008) Creative economy of UNCTAD. News in: TCDC Resource Centre, Bangkok. Available in Thai language at: <http://library.tcdc.or.th/news/news.php?id=17>, accessed 30 August 2011.
- TCDC. [Thailand Creative and Design Center]. (2011) *Creative Thailand*, TCDC, Bangkok, Year.3, Vol.1. Available in Thai language at: <http://www.tcdc.or.th/creativethailand/magazine/19534>, accessed 10 October 2011.
- Thomas, G. (2011) *How to Do Your Case Study: A Guide for Students and Researchers*, Sage, Thousand Oaks, California.
- Trochim, W. (2006) Qualitative approaches. In: Research methods knowledge base. Available at: <http://www.socialresearchmethods.net/kb/qualapp.php>, accessed 27 June 2015.

- UNCED. [United Nations Conference on Environment and Development]. (1992) *Agenda 21*, United Nations Environment Programme. Available at: <http://sustainabledevelopment.un.org/content/documents/Agenda21.pdf>, accessed 27 March 2013.
- UNCTAD. [United Nations Conference on Trade and Development]. (2008) *Creative Economy Report 2008*, United Nations, Geneva.
- UNCTAD. [United Nations Conference on Trade and Development]. (2010) *Creative Economy Report 2010*, United Nations, Geneva.
- UNESCO Bangkok. [United Nations Educational, Scientific and Cultural Organization: Bangkok]. (2001) UNESCO Award of Excellence for Handicraft. Available at: <http://www.unescobkk.org/fr/culture/creativity/handicraft-award/>, accessed 14 November 2011.
- UNIDO. [United Nations Industrial Development Organization]. (2007) *Creative Industries and Micro and Small Scale Enterprise Development: A Contribution to Poverty Alleviation*, UNIDO, Vienna. Available at: <http://www.unido.org/index.php?id=o69266>, accessed 3 September 2011.
- UNSD. [United Nations Statistics Division]. (2002) ISIC Rev.3.1 [International Standard Industrial Classification of All Economic Activities, Rev.3.1]. Available at: <http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=17>, accessed 6 November 2011.
- Valsecchi, F. and Ciuccarelli, P. (2009) "Ethnographic approach to design knowledge: Dialogue and participation as discovery tools within complex knowledge contexts". Available at: <http://urijoe.org/content/wp-content/uploads/IASDR20091087.pdf>, accessed 1 September 2012.
- Van der Ryn, S. and Cowan, S. (ed.2007, 1st ed.1965) *Ecological Design*, Washington D.C., Island Press.
- Visocky O'Grady, K. and Visocky O'Grady, J. (2009) *A Designer's Research Manual: Succeed in Design by Knowing Your Clients and What They Really Need*, Rockport Publications, Beverly.
- Walker, S. (2006) *Sustainable by Design: Explorations in Theory and Practice*, Earthscan, London.
- Walker, S. (2011) *The Spirit of Design: Objects, Environment and Meaning*, Earthscan, London.
- Walker, S. (2011b) Design for sustainability: practice-based research. Teaching material in: Design, Sustainability and Contemporary Issues (course code: IMAG411), Lancaster University, Lancaster.
- Walker, S. (2011c) The Industrial Revolution 1750-1900. Teaching material in: Design, Sustainability and Contemporary Issues (course code: IMAG411), Lancaster University, Lancaster.
- Walker, S. (2012) "The object of nightingales: design values for a meaningful material culture". In: *Design and Culture*, Vol.4, No.2, pp.149-170.
- Walker, S. (2013a) Systemic shift: designing for transition to sustainability. Presentation in: Seminar of sustainability in broadcast and digital media by BBC R&D, New Broadcasting House, London, 6 March 2013. Available at: <http://www.bbc.co.uk/rd/events/sustainability-2013-03>, accessed 27 May 2013.
- Walker, S. (2013b) Practice-based research in design for sustainability. Teaching material in: ERASMUS Intensive Programme 2013, Department of Product and System Design Engineering, University of the Aegean.
- Warren, W. (1983) *Jim Thompson: The Legendary American of Thailand*, Jim Thompson Thai Silk Company, Bangkok.
- Wherry, F. (2008) *Global Markets and Local Crafts: Thailand and Costa Rica Compared*, Johns Hopkins University Press, Baltimore.
- Wikipedia. (2014) "Regions of Thailand". Available at: [http://en.wikipedia.org/wiki/Regions\\_of\\_Thailand](http://en.wikipedia.org/wiki/Regions_of_Thailand), accessed 15 April 2015.
- Williamson, F. A. H. (1956) *Methods of Book Design: The Practice of an Industrial Craft*, Oxford University Press, London.
- Wisdom, J., Hoffman, K. and Mihás, P. (2014) Mixed methods: approaches for combining qualitative and quantitative research strategies (Chapel Hill). Syllabus in: 2014 ICPSR Summer Program, Odum Institute for Research in the Social Sciences, University of North Carolina. Available at: <http://www.icpsr.umich.edu/icpsrweb/sumprog/courses/0132>, accessed 15 September 2014.



- World Commission on Environment and Development. [WCED]. (1987) *Our Common Future*, Oxford University Press, Oxford.
- World Crafts Council: Asia Pacific Region. [WCC-APR]. (2009) APR-Sub Regions: South East Asia. Available at: <http://wccapr.org/south-east-asia.htm>, accessed 6 April 2012.
- World Intellectual Property Organization. [WIPO]. (2015) Geographical Indications. In: About IP. Available at: [http://www.wipo.int/geo\\_indications/en/](http://www.wipo.int/geo_indications/en/), accessed 25 June 2015.
- Wright, L. F. (1927) "In the cause of architecture: the architect and the machine". In: Adamson, G. (2010), ed. *The Craft Reader*, Berg, Oxford, pp.107-110.
- Writing@CSU (1993) Writing guide. In: Educational website supported by Colorado State University. Available at: <http://writing.colostate.edu/guides/page.cfm?pageid=1386>, accessed 13 September 2014.
- Yanagi, S. (1972) " 'The way of craftsmanship', from the unknown craftsman: a Japanese insight into beauty". In: Adamson, G. (2010), ed. *The Craft Reader*, Berg, Oxford, pp.167-176.
- Yin, K. R. (2009) *Case Study Research: Design and Methods (Forth Edition)*, Sage, Thousand Oaks, California.
- Yongwikul, M. (2011) "Trivero". In: *Creative Thailand*, TCDC, Bangkok, Year.3, Vol.1, pp.24-27. Available in Thai language at: <http://www.tcdc.or.th/creativethailand/magazine/19534>, accessed 10 October 2011.
- Yothaka International. (1989) Bangkok. Available at: [www.yothaka.com](http://www.yothaka.com), accessed 1 March 2012.

## Appendix – A

### A literature review of six enterprises in craft-based design manufacturing

This information relates specifically to Chapter 3, Craft in General and in the Context of Sustainability. The six enterprises are as follows.

No.	Enterprise	Establishment	Main product	Country
A1	Erzgebirge Crafts	Claimed for inherited skill, ca.15 <sup>th</sup> century	Traditional wooden toys and gifts	Germany
A2	Ermenegildo Zegna	1919	Fabrics and clothes	Italy
A3	Jim Thompson, The Thai Silk Company	1948	Fabrics and interior furnishings	Thailand
A4	David Millor	1954	Metalwork for kitchen utensils	UK
A5	Yothaka	1989	Furniture made using traditional weaving techniques	Thailand
A6	Dedon	1991	Outdoor wicker furniture and industrial crafts	Germany



The Erzgebirge Mountains in eastern Germany have gained an international reputation as a region for handmade Christmas-gift manufacturing because of the high quality and variety of products that contribute to the local history and cultural heritage (Bliz, 1998). s

The establishment of a handicrafts industry in the Erzgebirge Mountains was driven by socio-economic and environmental forces that occurred after a downturn in the mining industry (Erzgebirge Palace, 2006; Miller, 2007).

The discovery of ores in the Erzgebirge Mountains in the 15<sup>th</sup> century provided a large number of people with mining jobs and an income (Erzgebirge Palace, 2006; Miller, 2007). However, due to rapid exploitation of ores over the centuries, most of the mines in this region have closed and local residents have recently become protective of their local resources (Miller, 2007). Mining is considered to be an insecure job in terms of workers' health and safety, the length of time for which they are employed and their income, especially in the winter months; thus, miners are forced to seek alternative work (Miller, 2007).

Trees are abundant in the mountains and wood is a natural and renewable resource; the miners used to make wooden crafts as a hobby during the winter months (Miller, 2007). The Erzgebirge artisans started to use their traditional skills (carving and turning) with simple hand tools<sup>1</sup> to the creation and development<sup>2</sup> of wooden toys (Bliz, 1998; Erzgebirge Palace, 2006; Miller, 2007), developing a cottage industry for handicrafts while simultaneously turning the

<sup>1</sup> **Tools:** e.g. knives, sharp cutting tools, clamps and lathes.

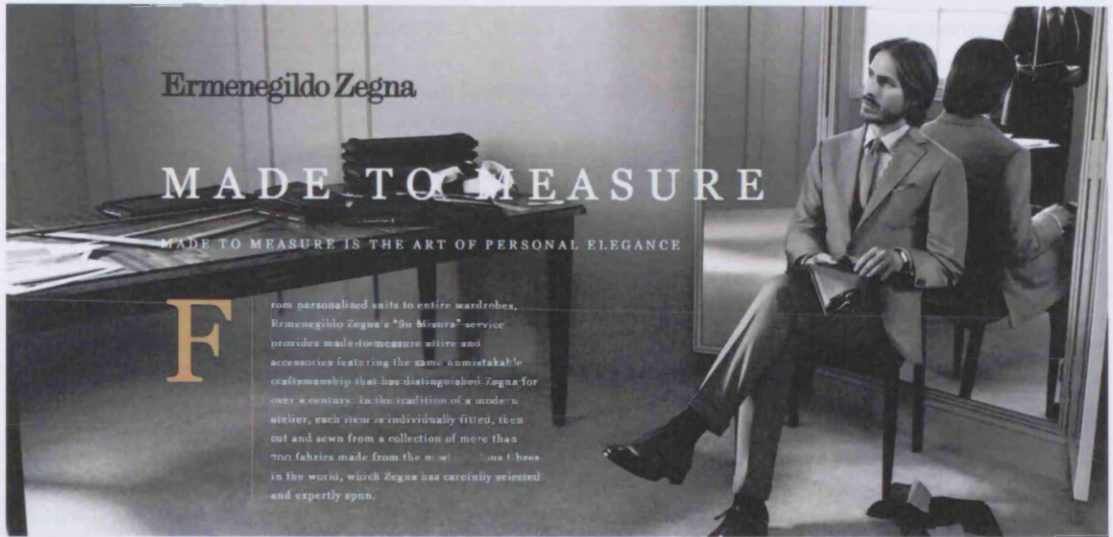
<sup>2</sup> **Development:** e.g. changing content, design and function, based on traditional practices.

Erzgebirge Mountains into a tourist destination for income generation (Erzgebirge Palace, 2006; Miller, 2007).

The extensive range of crafts includes candle carousels, Christmas pyramids, nutcrackers, figurines, violins, silver jewellery, intricate embroidery and some stonework. The main market is associated with Christmas celebrations and decorations, i.e. gifts (Bliz, 1998; Erzgebirge Palace, 2006; Miller, 2007).

Most Erzgebirge craft manufacturers are family-owned businesses, varying in the number of artisans and types of workplace from a small group of artisans in a workshop, to a medium-sized factory with more than 140 artisans (Erzgebirge Palace, 2006). Some of these manufacturers provide extensive services, from making to marketing and distribution.

In terms of trade channels, a number of online stores can be found on the Internet. In addition, there are trading companies based in Germany, the United Kingdom and the United States. These trading businesses select craft manufacturers based on the criterion of "high quality, handcrafted German toys" (Echt Erzgebirge) in terms of hand-making and hand-painting, high quality wood, durability (i.e. of colour) and originality of place and people (products must be made completely by German craftspeople and in Germany itself) (Erzgebirge Palace, 2006; ChristKindl-Markt, 2007; Foster's Imports, 2012). Similarly, traders also look for reliable service (Erzgebirge Palace, 2006; ChristKindl-Markt, 2007; Foster's Imports, 2012), and sustainable business practices, i.e. environmental responsibility (Foster's Imports, 2012).



Ermenegildo Zegna is an Italian family enterprise established in 1919 which makes woollen textiles in Trivero, Italy; over four generations of the Zegna family, the company has successfully developed the world's finest textiles and become a global brand for menswear, with retail stores in 86 countries worldwide (Ermenegildo Zegna Group, 2001).

The company offers a diverse range of products including woollen fabrics, shirts, trousers, accessories, sportswear and underwear – from ready-to-wear collections to made-to-measure tailoring (Ermenegildo Zegna Group, 2001).

According to Ermenegildo Zegna Group (2001), its business principles include:

- “Long-term objectives”;
- “Family ownership to ensure continuity”;
- “A sound ethical commitment enshrined in a rigorous corporate governance system”.

It has guidelines to ensure the continuity of textile production and its quality (Ermenegildo Zegna Group, 2001; Yongwikul, 2011):

- Acquisition of the best *raw materials*, i.e. natural fibres from original producers (farmers), which contributes to the *premium quality* of fabrics and clothes;

- Careful consideration of the incorporation of *modern technology* in production, especially in its international network, with respect to the natural environment and craftsmanship, e.g. traditional tailoring in localities;
- Ensuring a *fair relationship* across communities, regions and countries; this relates largely to the continuous improvement of raw materials (fibres);<sup>3</sup>
- Taking *care of the natural environment and people's well-being* for long-term success, e.g.:
  - *Planting thousands of pine trees* on barren land, which later results in the area becoming a tourist destination, i.e. during the spring season;
  - *Building facilities*<sup>4</sup> for the workers and communities in the locale, which can help to minimise the migration of local workers to other big cities, while attracting people from other connecting towns to work in the wool mill.
- Investing in *renewable energy*, particularly water power for generating electricity, which can reduce the cost of production in the long run and also offer environmental benefits.

In addition, having a wide range of customers worldwide is mentioned (Ermenegildo Zegna Group, 2001; Yongwikul, 2011) as being key to business survival and continuation, especially during an economic crisis. The company began with small tailors' shops in major cities in Italy. It then expanded to neighbouring countries, e.g. France, Spain and Switzerland. This was followed by expanding into more distant locations, e.g. America, Hong Kong and China.

---

<sup>3</sup> **Fibres:** e.g. *wool* from Australia; *mohair* from Turkey and Texas; *cashmere* from Iran, Russia, Afghanistan, Turkey, India and Mongolia; *alpaca* from Bolivia and Peru; *Vicuna* from Peru – complementary to silk and cotton.

<sup>4</sup> **Facilities:** e.g. roads (to connect Trivero with other towns), a meeting hall, library, gym, cinema, swimming pool, medical centre and nursery school.





Silk-weaving with simple, hand-operated wood and bamboo looms has long been a traditional craft and part of the cultural heritage of Southeast Asia; however, after the Second World War, traditional weaving had almost disappeared from Thailand due to:

- The arrival of factory-made textiles and clothes from abroad at lower prices;
- The perception of traditional silk fabrics, in which silk was seen as an expensive fabric appropriate only for special occasions and with a traditional look;
- Issues relating to the quality of production with natural processes, e.g. vegetable-dye colours and silk fabrics fading over time (Warren, 1983, p.56).

Jim Thompson<sup>5</sup> established The Thai Silk Company Limited in Bangkok in 1948 (Warren, 1983). This brought about the revitalization and development of traditional production of silk fabrics in many ways (Warren, 1983, pp.55–69; Jim Thompson: The Thai Silk Company, 2009).

<sup>5</sup> **Jim Thompson:** an American who came to Thailand during the Second World War.

▪ **Production system:**

- Production processes were adapted to suit different regions in consideration of the particularities of local communities,<sup>6</sup> e.g. in terms of natural resources, climate and skilled workers (Warren, 1983; Jim Thompson: The Thai Silk Company, 2009; Jim Thompson Farm, 2009);
- There have been improvements in materials and tools for the production of greater quantities and higher quality, e.g. high quality fibres, chemical dyes and modified looms (Warren, 1983).

▪ **Product and service together with branding and marketing:**

- There has been a focus on the design of silk fabrics and products in classic and contemporary styles for the high fashion market (Warren, 1983, pp.55–69; Jim Thompson: The Thai Silk Company, 2009). Besides fabrics, the company also offers a bespoke service for textiles and home furnishings, e.g. furniture and interior accessories (Jim Thompson: The Thai Silk Company, 2009; Jim Thompson Farm, 2009);
- The company has also initiated other kinds of business, which link to the history and reputation of Jim Thompson and attract more customers, e.g. Jim Thompson's house (a museum) for tourists and scholars, Jim Thompson's restaurant, Jim Thompson's farm and textiles seminars (Jim Thompson: The Thai Silk Company, 2009; Jim Thompson Farm, 2009);
- There has been an increase in the number of business agents and retail outlets at domestic<sup>7</sup> and international<sup>8</sup> levels (Jim Thompson: The Thai Silk Company, 2009).

▪ **Employment and income generation:**

---

<sup>6</sup> **Local communities** included:

- Weaving communities in Bangkok in the post-war period;
- Communities for the production of silk threads in the northeastern region, which later became part of the farmland established in 1988 in Nakhon Ratchasima province for the production of raw materials in collaboration with local farmers.

<sup>7</sup> **Domestic:** Bangkok and other provinces.

<sup>8</sup> **International:** Germany, Malaysia, Singapore and America.

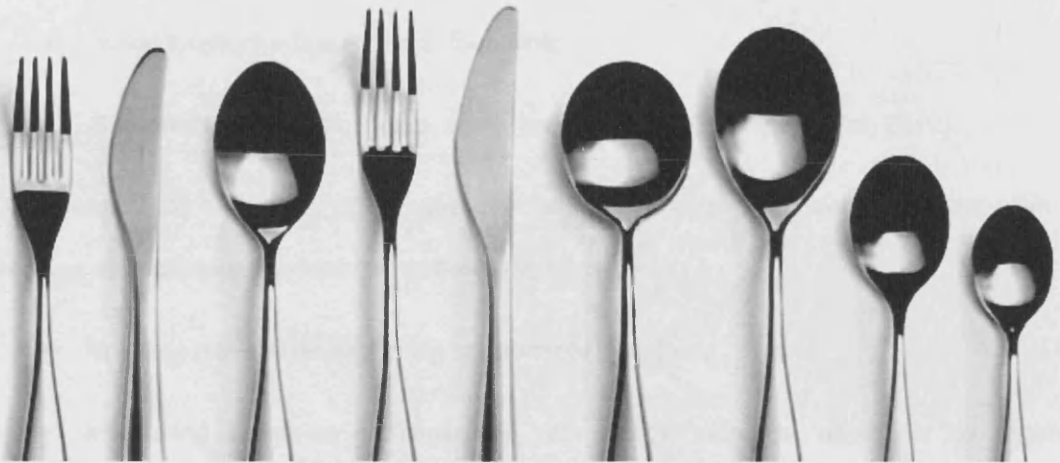


The revival and development of traditional production in silk fabrics provides a number of local families, especially those living in rural areas, with skills leading to employment and sufficient income (Warren, 1983; Jim Thompson Farm, 2009).

## A4 DAVID MELLOR (1954)

---

### DAVID MELLOR



In 1954, David Mellor, a royal designer for industry, set up a silver smithy (workshop) in Sheffield, United Kingdom to train designer-makers and to produce one-off items of silversmithing (David Mellor, 2012). Since then, it has expanded into large-scale manufacturing and retailing at the domestic and international levels; the company has gained an international reputation for its expertise in metalwork (David Mellor, 2012).

Business operations have expanded over two generations of the Mellor family, and now include:

- A studio workshop and industrial design office;
- A cutlery factory;
- A shop (in London), and a visitor centre (in Sheffield) comprising a design museum, café and country shop;
- A website, online shop and online marketing, especially for gifts and wedding items (David Mellor, 2012).

For production, the company combines techniques used in metalsmithing with those used for other materials, especially glass, ceramics, wood, wicker and plastic, resulting in a wide range of products as follows:

- Kitchenware and tableware – cutlery, teapots, plates, bowls, knives, trays, candelabras;
- Furniture – tables, stools, benches, folding trolleys;
- Street furniture – bus shelters, fountains;
- Gardenware – garden shears, saws, hacksaw frames (David Mellor, 2012).

David and Colin Mellor (2012) suggest the following principles for designers who wish to become entrepreneurs and survive in business endurance:

- Knowing one's skills and being comfortable with them;
- Integrating hands-on craftsmanship with design activities, especially as regards materials and techniques;
- Focusing on a few things at a time;
- Embracing the locality;
- Improving design standards in a wide range of products which affect the life of large number of people;
- Producing things of high quality and in volume;
- Managing the complete cycle of the supply chain (from the conception of a product, through production, and then retailing and finally the delivery of goods).



Yothaka International Co., Ltd. was established in 1989 and pioneered the use of water hyacinths for the manufacture of furniture in Thailand (Yothaka, 1989). A wide range of furniture, home furnishings and accessories are produced by hand, targeting the upper-middle class domestic market and overseas trade (Bassett, 2010, pp.17–23).

To stay at the forefront in the market, creativity and dynamism are essential; it is necessary to regularly design new product collections (based on the existing structures of products) every year (Yothaka, 1989). Yothaka's products are distinctive in:

- The design of products which is seen as a sophisticated and hybrid style that combines the traditional Asian and modern appearance (Yothaka, 1989; Bassett, 2010, pp.18–19);
- The use of traditional hand-weaving techniques, which are low-tech, labour-intensive and require little mechanized equipment; this is inspired by history and traditional culture (Yothaka, 1989; Bassett, 2010, pp.17–19).
- The use of fibrous materials ranging from natural plant<sup>9</sup> fibres to synthetic<sup>10</sup> eco-friendly materials (Yothaka, 1989; Bassett, 2010, p.18).

<sup>9</sup> **Plant fibrous materials:** e.g. water hyacinth, vine fern, pineapple fiber paper and hilltribe cloth-stitch rope.

<sup>10</sup> **Synthetic eco-friendly materials:** e.g. recyclable plastic (polyethylene, PE).

The **production of fibrous plant materials** in particular localities contributes to:

- Safeguarding the *livelihoods* and *well-being* of local people through job creation (as an alternative to other work, e.g. the cultivation of opium poppies) and employment for income (Yothaka, 1989);
- *Ecological improvement*, e.g. the collection of water hyacinth waterweeds, which may clog a river, thus improving water quality by increasing the level of oxygen (Yothaka, 1989);
- The *revival of traditional weaving techniques* that were used for making basketry and vessels centuries ago, yet rapidly faded away during the 20<sup>th</sup> century (Bassett, 2010, p.19).

The use of synthetic fibrous materials, initiated in 2005, contributes to:

- *Market expansion* from indoor- to semi-outdoor furnishings (Yothaka, 1989);
- The *preservation* of vanishing plants, i.e. rattan, via substituting them with synthetic materials that resemble natural materials (Yothaka, 1989);
- The retention of a *brand image* led by design for lifestyle products with a hybrid appearance (Yothaka, 1989). This is based on the combination of “inherited [craft skills and] techniques and technology”, and “natural and modern materials” (Bassett, 2010, p.20).



Dedon was founded as a family business in 1991 in Germany, with a team of three people producing furniture. The company became well-known for “premium outdoor furniture” made from synthetic fibres with high standards in production and design. In the 2000s, the business expanded distribution to more than 80 countries worldwide, and now has approximately 3,000 employees.

The family has, for several generations, been involved in industrial manufacture based on plastic extrusion, which was later combined with traditional weaving techniques from Asia. The company initially used overseas suppliers, i.e. from Thailand and China. However, in 2000, due to suppliers’ inability to meet Dedon’s high level of quality, the company set up its own factory on Cebu Island in the Philippines. By having its own factory, Dedon can control the quality of products in every step of the process, from fibre materials to framing, weaving, packaging and logistics.

The principles of manufacturing in relation to sustainability include:

- Design by renowned designers to ensure the originality of collections;
- The creation of products of premium quality that are durable and will last for several years (20 years is claimed). This is believed to be a way of minimising the use of natural resources and thus ecological impact.
- A commitment to responsible practice concerning environmental issues, e.g.:
  - The use of eco-friendly fibres, including recyclable and non-toxic materials;
  - Improving environmental performance in every phase of production, e.g. zero waste across the entire supply chain;
  - Providing support for ecological projects, e.g. tree planting, coastal clean-ups.

## **Appendix – B**

### **Documents related to ethical approval and consent from informants for field research**

These documents are:

- B1 Information sheet and consent form used for the field research, approved by the Ethics Committee of Lancaster University;
- B2 Questions for the semi-structured interviews.





## PARTICIPANT INFORMATION SHEET

I, **Disaya Chudasri**, a PhD Student at Imagination Lancaster, Lancaster Institute for the Contemporary Arts (LICA), Lancaster University, United Kingdom, would like to invite you to participate in my research between 22 May 2012 and 31 January 2013.

This letter provides information about my research project for you to consider with a view to participating in it. Please take the time to read this information carefully and do feel free to ask any questions you may have so that the research purpose can become clear and you can decide whether to take part in the research. At the end of this letter, there is a consent form to confirm your consent to give information for this research.

### **Title of the Project**

Design and Sustainable Development in the Craft Industry: A Case Study in Upper Northern Thailand

### **Aim of the Study**

To develop a set of design strategies to help support the viable future of the craft industry in the upper northern region of Thailand, in line with the principles of design for sustainability

### **Who is funding it?**

This research project is partly funded by:

The College of Arts, Media, and Technology, Chiang Mai University, Thailand

### **Why is it being conducted?**

Craft production is identified as a sector that can help to create a sustainable world through *human activities* in response to social justice, economic equity and environmental stewardship – the three interdependent aspects within sustainable development. Having reviewed the available literature about crafts worldwide, there is strong evidence to suggest that many aspects of *traditional* crafts go hand in hand with sustainable development.

Thailand has a long-standing tradition of elaborate ceremonies and ornate arts and crafts. However, for the past twenty years, the craft industry has been unstable. Handmade cultural artefacts have been declining rapidly, while commercial crafts, especially those produced mainly for the tourist market, are not selling well in the domestic market and are unable to compete with international competitors. Therefore, the researcher initiates this research project with the aim to develop a set of design strategies to help support the viable future of the craft industry in the upper northern region of Thailand, in line with the principles of design for sustainability.

### **Why are field studies?**

Having conducted literature review in Thai crafts while staying outside Thailand for about one year, the researcher becomes aware that very little information about Thai crafts is available in documented information, especially at international level, whether publications, articles in printed or Web-based information. Therefore, field studies are required. These are especially important to the development of research in design strategies, production of literature about the craft industry, and dissemination at international level. Practice-based research and design management are main approaches.



### Objectives for Field Studies

Through field studies, the researcher plans to come up with summaries of:

1. A set of criteria for design
2. Craft-design methods – for the development of the craft industry
3. Tools – to support the development of the craft industry

### Why have I been invited?

You have been invited to participate because you have been identified as an expert in the field of crafts with the role(s) of producer, buyer and/or supporter.

### Do I have to take part?

No. It is up to you to decide whether or not to take part in this research. Your participation is entirely voluntary and you are free to withdraw at any time, without giving any reason.

### What research is being conducted? What will happen if I take part?

Primary research will be carried out using various methods at different times.

- *Semi-structured interviews* will be conducted with three groups of stakeholders – producers, buyers and supporters – in order to arrive at (at least) 21 informants. The interviews will take approximately 30-60 minutes each and will be conducted during the period: May to December 2012.
- *Case studies* with local producers will be conducted in order to develop craft-design approaches, tools to support the development of the selected cases. These will include multiple techniques, including observations, photography, video recording, and conversations with participants. These will be conducted during the period: September-December 2012.
- *Survey* will be carried out via seminars, exhibitions and websites to arrive at 50-150 respondents. A brief explanation of the research will be given to participants to gauge their understanding and willingness to participate. The researcher will file the data by participant number, not by name. A survey will take about 15 minutes and be conducted between October 2012-January 2013.

### Will my participation be kept confidential? What will happen to the results?

Yes. All identifiable data (e.g. interview notes, audio-tapes, questionnaires) will be encrypted and then transferred to a secured place at the university or my home office. In case of using portable device(s), which cannot be encrypted, any identifiable data on it/them will be transferred to a secure, encrypted medium. Then, identifiable data will be deleted from the portable device as quickly as possible.

### Where will the results appear and who is likely to have access to them?

The results will appear in:

- Future reports, articles and presentations accessible to academia worldwide;
- Thesis – available at Lancaster University, United Kingdom, mostly to academia this region.

### Contact Information

For answers to any further questions you may have, feel free to contact the **researcher** for clarification.

**Disaya Chudasri**

UK Mobile: +44 (0)770 456 6747

Thailand Mobile: +66 (0) 89 116 1155

Email: [dchudasri@yahoo.com](mailto:dchudasri@yahoo.com), [d.chudasri1@lancaster.ac.uk](mailto:d.chudasri1@lancaster.ac.uk)

Skype name: disayachudasri

If participants wish to contact an **independent person** at Lancaster University about this research, please feel free to contact:

**Professor Stuart Walker**

Imagination Lancaster, LICA Building,  
Lancaster University, Bailrigg, Lancaster, LA1 4YW, UK

Tel: +44 (0) 1524 510873

Email: [s.walker@lancaster.ac.uk](mailto:s.walker@lancaster.ac.uk)

**CONSENT FORM**

**Understanding of Participation**

I confirm that I have read and understood the above information, that I agree to take part in this research study, and that my identity will remain confidential. I will receive a copy of this form for reference. I understand that any information given by me may be used in future reports, articles, theses or presentations by the research team.

I give my permission to be:

- Audio-taped:    [.....] Yes                    [.....] No
- Photographed: [.....] Yes                   [.....] No
- Video-recorded: [.....] Yes                [.....] No

I prefer *my name*:

[.....] to remain anonymous, i.e. NOT to appear in any reports, articles, theses or presentations.

[.....] to be acknowledged / cited, with the condition that the content will be reviewed by me.

<b>RESEARCHER Name</b> _____ Signature _____ Date	<b>PARTICIPANT Name</b> _____ Signature _____ Date
---	--

## B2 – Questions for semi-structured interviews

No.	Question
1	<p>What role(s) would you describe yourself as an expert in crafts?</p> <ul style="list-style-type: none"> <li>a. <i>Producer</i> (e.g. local craft producers, craft enterprise managers, designer-makers)</li> <li>b. <i>Supporter</i> (e.g. government agents, academia, business advisors, designers, design managers)</li> <li>c. <i>Buyer</i> (e.g. retail brand manager, traders, users)</li> <li>d. Other than the above _____</li> <li>e. If chose more than one, your main role is _____</li> </ul>
2	<p>Could you explain about the current situation of craft production in northern Thailand?</p> <ul style="list-style-type: none"> <li>▪ This can be about craft production in general or for the specific sector(s).</li> </ul>
3	<p>Could you suggest the most potential/successful craft sector(s) of this region?</p> <ul style="list-style-type: none"> <li>▪ What are your criteria/reasons for suggesting that?</li> <li>▪ With that regards, could you suggest any specific cases/producers/products?</li> <li>▪ Could you elaborate on what factors have led them to succeed?</li> </ul>
4	<p>Could you identify any craft sector(s) that are not strong or less successful?</p> <ul style="list-style-type: none"> <li>▪ What are your criteria/reasons for suggesting that?</li> <li>▪ With that regards, could you suggest any specific cases/producers/products?</li> <li>▪ Could you explain what factors have made those sectors to become less successful?</li> </ul>
5	<p>From the following groups, please select the potential products for enterprises, in rank of three, starting from one (1) for the most potential group.</p> <ul style="list-style-type: none"> <li>___ Furniture, wickerwork</li> <li>___ Home decoration, carpets</li> <li>___ Gifts, toys, celebration items</li> <li>___ Garments, textiles and fabrics, yarn products</li> <li>___ Jewellery</li> </ul>
6	<p>What are the markets of crafts from this region? Who are the customers?</p>
7	<p>What is your understanding to “design process” in craft?</p> <ul style="list-style-type: none"> <li>▪ How can design help to improve/develop a viable future of craft in this region?</li> </ul>
8	<p>What are the core elements in crafts that should be retain? Why?</p>
9	<p>How can we motivate a continuity of craft production? Who should be involved?</p>
10	<p>Have you heard about “the concept of design for sustainable handicrafts”?</p> <ul style="list-style-type: none"> <li>▪ What is your understanding to this concept?</li> <li>▪ How does this concept apply in enterprises?</li> <li>▪ How does the craft production affect society, economics and environment?</li> </ul>

## **Appendix – C**

### **Three grouping of the 26 informants in semi-structured interviews, and their attributes**

(See next page)

### Three grouping of the 26 informants in semi-structured interviews, and their attributes

No.	Group			Informant's role at time of interview (2012)	Years of experience
	Producer	Supporter	Buyer		
<b>PRODUCERS</b>					
P1	✓			The owner/producer of a textile business and fashion accessories	10+
P2	✓			The owner/producer of a blacksmith business producing traditional swords	20+
P3	✓	✓		The owner/partner of a silver jewellery business, previously worked as a jewellery maker and the president of a local silversmithing association	28
P4	✓	✓		The manager/inheritor of a family business producing silver jewellery (involved in it since the age of 10)	14
P5	✓			A designer in a small enterprise, which collaborates locally with handicraft communities for products made from hand-made paper (mulberry or saa paper)	10+
P6	✓	✓		The owner of a ceramics business, previously engaged as a committee member in the development programs of handicraft communities	25+
P7	✓			The owner/producer of a textile business and fashion accessories	10+
P8	✓	✓		The owner/producer of a company producing wood-carved products, the president of a local woodcarving association, a consultant to SMEs	20+
P9	✓			The owner/producer/design director of a company producing wicker ware for interior decoration	10+
P10	✓		✓	The design director and partner in a company producing wooden and wicker furniture	25+
<b>SUPPORTERS</b>					
S11		✓		An educator in design and Head of Department in a university, an advisor for SMEs	15
S12		✓	✓	The government officer in the Department of Industrial Promotion, a buyer for export	33; 10
S13		✓	✓	The president of ASEAN Gifts Federation, the Honorary President of Thai Gifts Premiums and Decorative Association, the owner/partner of a company producing gifts and souvenirs	25+
S14		✓		The chairman of the Board of Executive Directors of the largest commercial bank in Thailand, previously worked as the Industry Minister of Thailand, the Deputy Secretary in the Office of the National Economics and Social Development Board (NESDB), an economist in the World Bank	35+
S15		✓		The government officer in the Department of International Trade Promotion officer	15+
S16	✓	✓		The secretary of the World Crafts Council (Asia Pacific Region), an advisor in craft education and training, a project manager (especially for interior decoration)	2; 10+; 3
S17	✓	✓		The president of Northern Handicraft Manufacturers and Exporters Association (NOHMEX), the owner of a textiles business	20+
S18		✓		The government officer in the Department of Industrial Promotion	33
S19		✓	✓	An educator in architecture and design and Head of the Department in a university, an advisor in production and marketing, a promoter (PR) for local products, a business partner	10+
S20		✓		The owner/partner of businesses producing design magazines and other design-related ones, a consultant in design and craft for the Ministry of Culture and the Support Arts and Crafts International Centre of Thailand (SACICT)	15+
S21		✓		A design educator in a university, an advisor in enterprise projects run by a government agency	15+
<b>BUYERS / TRADERS</b>					
B22			✓	A technician in the purchasing department of a global company	10+
B23		✓	✓	The owner of small business which imports handicrafts from Thailand; previously worked as the government officer in the Department of International Trade Promotion	12; 13
B24		✓	✓	Previously worked as: the manager/partner of a company trading handicrafts (operated 1988–2008) and a senior member in the United States Agency for International Development (USAID)	20; 10
B25	✓	✓	✓	The owner of a business producing handicrafts for international clients; a trainer/consultant in enterprising and innovative business programmes associated with UNDP, <sup>11</sup> World Bank, SNV, <sup>12</sup> GTZ, <sup>13</sup> UNESCO, <sup>14</sup> UNIDO <sup>15</sup> and government agencies	35+
B26		✓	✓	The managing director of a company providing support to craftspeople and distributing handicrafts	20+

<sup>11</sup> UNDP: United Nations Development Programme, <http://www.undp.org/>.

<sup>12</sup> SNV: Not-for-profit development organization, with headquarters in The Netherlands (The Hague), <http://www.snvworld.org/>.

<sup>13</sup> GTZ: German Technical Cooperation Agency.

<sup>14</sup> UNESCO: The United Nations Educational, Scientific and Cultural Organization, <http://whc.unesco.org/>.

<sup>15</sup> UNIDO: The United Nations Industrial Development Organization, <http://www.unido.org/>.

## Appendix – D

### The development of selection criteria for case studies

#### D1 – First version

Subject	Development process
Criteria	Three directions for development of handicrafts: <i>replication</i> , <i>adaptation</i> and <i>innovation</i> (recommended by informants in semi-structured interviews)
Researcher's actions	<ul style="list-style-type: none"> <li>▪ Searched for producers with relevant qualities via literature review and enquiries with informants</li> <li>▪ Accumulated information over two weeks on:               <ul style="list-style-type: none"> <li>○ Possible producers, approx. 10 identified;</li> <li>○ Noted informant's judgement about whether which producers fall into replication, adaptation or innovation categories.</li> </ul> </li> <li>▪ Compared judgements and found different conclusions, leading to awareness that the criteria were problematic.</li> </ul>
Informants' feedback on the criteria	<ul style="list-style-type: none"> <li>▪ Identifying the producers that match the three directions was subjective and problematic. It depended on the informant's interpretation and the criteria, which often differed, for example:               <ul style="list-style-type: none"> <li>○ <i>Replication</i> – There were disagreements here, and some doubted whether design had anything to do with the "replication" of traditional crafts. They thought of a term "imitation" instead;</li> <li>○ <i>Adaptation and innovation</i> – Some commented that these overlap to some extent, depending on one's perspective;</li> <li>○ <i>Innovation</i> – This was argued in terms of, for example, the timeline of development for when it was done. Some informants identified advances in production and product development introduced by a particular producer 30 years ago as "innovation", while others disagreed, reasoning that the techniques already became common.</li> </ul> <p>They also mentioned different areas of development e.g. material and production development and product development.</p> </li> <li>▪ The researcher was advised to amend the criteria. Otherwise, the terms would have to be defined for the purposes of the research to ensure a common understanding among the others.</li> </ul>
Researcher's decisions on the criteria	<ul style="list-style-type: none"> <li>▪ These terms (<i>replication</i>, <i>adaptation</i>, <i>innovation</i>) were discarded as criteria because:               <ul style="list-style-type: none"> <li>○ This recommendation was premature and was in fact, an assumption about the entire handicrafts sector, which might or might not be true, or partly true, for a particular subsector, i.e. handwoven textiles;</li> <li>○ It might not be possible to find enough case studies to demonstrate these three directions within three months;</li> <li>○ Other factors had been suggested and needed to be considered, such as:                   <ul style="list-style-type: none"> <li>○ Level of business provider (SME, community enterprise);</li> <li>○ Product category (e.g. clothes, handbags, shoes, carpets);</li> <li>○ Product style (e.g. traditional, folk and contemporary styles);</li> <li>○ Principal material (e.g. cotton, silk).</li> </ul> </li> </ul> </li> <li>▪ Thus, the criteria needed to be more specific and relevant to the handwoven textiles.</li> </ul>

**D2 – Second version (part 1 of 2)**

Subject	Development process
<p><b>Criteria</b></p>	<ul style="list-style-type: none"> <li>▪ Tradition               <ul style="list-style-type: none"> <li>○ Continuity of production (years)</li> <li>○ Ethnic identity</li> </ul> <p>The meaning of tradition in the context of hand-woven textiles in northern Thailand has to do with the weaving traditions of the ethnic groups practised locally – related to beliefs, the need for clothes and the creation of a group identity. Weaving has been inherited over the generations. Thus “continuity of production” and “ethnic identity” were articulated as characteristics which could help to sift producers.</p> </li> <li>▪ Handicrafts and markets               <ul style="list-style-type: none"> <li>○ Product diversification (e.g. fabrics, garments, home furnishings, accessories)</li> <li>○ Material (cotton or silk thread)</li> <li>○ Tourism initiative (product, service, other)</li> <li>○ Market range (domestic, tourist, export)</li> </ul> </li> <li>▪ Vision for sustainability               <ul style="list-style-type: none"> <li>○ Begin with environmental, social and economic aspects</li> </ul> </li> <li>▪ Credibility and recognition of the producer among the public</li> </ul>
<p><b>Researcher's actions and reflections</b></p>	<p>A. <b>Continued search for producers</b> and found approximately 30 producers in five provinces (Chiang Mai, Chiang Rai, Lamphun, Phrae, Nan) with information about materials and product types, production sites and contact details.</p> <p>B. <b>Decided on “replication”</b> of traditional handicrafts, as a focus for research on the basis of the findings of previous research, i.e. the literature review and semi-structured interviews. These found that sustainability could be seen in the traditional practices of craftspeople, yet handicraft production needs development for long-term viability. This criterion could be used for removing some producers from the list.</p> <p>C. <b>Reviewed the characteristics of the 30 producers</b> against the criteria and selected 11 producers who were deemed to fall into the “replication” category. However, the researcher could not find some of the information required about the producers to fulfil certain aspects of the criteria. (Information was acquired from the Web and paper sources, along with telephone enquiries).</p> <p>D. <b>Made initial contact with the listed producers (11)</b> and informally gained permission to conduct research on three producers, while the others were inaccessible. (Some did not answer the telephone, some needed the approval of top management, some preferred face-to-face discussions, and in some cases the group no longer existed or the leader had changed).</p> <p>At times, activities A–D happened concurrently. Due to a lack of information about and access to some producers, the researcher realised that other research techniques might be needed to collect sufficient information for decision-making.</p> <p>E. <b>Conducted a field trip</b>, travelling from Chiang Mai to Lamphun province (1 day). This was done with the general aim of visiting two companies identified as meeting the criteria for case studies. Both produce Thai silk brocade in Lamphun province (<i>pha mai yok dok Lamphun</i>), which is well known in the region.</p>

## D2 – Second version (part 2 of 2)

Subject	Development process
<p><b>Findings from field trip</b></p>	<p>In Lamphun province, the researcher:</p> <ul style="list-style-type: none"> <li>▪ <b>Was not given permission</b> to carry out research by two companies which gave the reasons relating to business confidentiality and the difficulty of gaining approval from multiple shareholders.</li> <li>▪ <b>Had conversations</b> with a designer, a weaver, a villager, the leader of a weaving group and a shop-owner. <ul style="list-style-type: none"> <li>○ Local workers provided insights useful to research.</li> <li>○ There were several local weavers and the owner of textile shop. However, they were assessed as not meeting several aspects of the criteria, i.e. product diversification, vision for sustainability and credibility and public recognition.</li> </ul> </li> <li>▪ <b>Gained a better understanding of textile production at the local level.</b> <ul style="list-style-type: none"> <li>○ <i>Weaving</i> is practised by several communities in villages in districts. Small- and medium-sized enterprises (SMEs) usually contact local weavers with jobs, which allows them to work at home or on company sites.</li> <li>○ <i>Accessibility to do research</i> within the allotted time seemed feasible at the community level, in comparison to other types of business operation, including community enterprises, small-to-medium sized enterprises (SME), non-governmental organizations (NGOs), foundations and vocational schools.</li> <li>○ There are several types of textiles and weaving techniques: tapestry (<i>ko</i> or <i>luang</i>); continuous supplementary weft (<i>khit</i>); discontinuous supplementary weft (<i>chok</i>); <i>ikat</i> (<i>mat mi</i> or <i>mat kaan</i>); brocade or twill-and-satin weave (<i>yok dok</i>) and twisted yarn (<i>pan kai</i>). Each group usually works on a particular technique. Weaving techniques and patterns convey the identity of ethnic groups.</li> <li>○ <i>Regarding brocade technique (yok dok)</i> and “Lamphun Brocade Thai Silk”, there was scepticism<sup>16</sup> about whether these had anything to do with the ethnic groups of the region.</li> <li>○ <i>Geographical Indication (GI)</i> is a symbol indicating intellectual property and guaranteeing production standards. It might, to some extent, help to add value, e.g. if goods are labelled “Lamphun Brocade Thai Silk” or “<i>pha mai yok dok Lamphun</i>”.</li> <li>○ <i>Materials</i> to some extent indicate class division, such as silk textiles for the royal court and the elite, cotton textiles for lower-class people. Employers usually provide weaving threads to weavers.</li> </ul> </li> </ul>
<p><b>Researcher's decisions on the criteria</b></p>	<p>Such findings suggested that the criteria would need amendment. Several aspects were impractical and irrelevant to the factors involved in handloom weaving in this region. There was a gap between an idealised view and actual practice. The criteria were based on desk-based research, and knowledge and opinions of the researcher and informants. They excluded factual information from producers in the field.</p>

<sup>16</sup> **Scepticism:** Some informants explained that *yok dok* (brocade) is a weaving technique practiced in the central region of Thailand. It is not common, and does not relate to ethnic groups in northern Thailand. During a weaving revitalization a long time ago [in the era of the Fifth King of Thailand], led by Royal princess Dara Rasmi, weaving with the brocade technique was introduced to the region through training in northern Thailand and adapted to traditional weaving. *In contrast*, the Lamphun Provincial Administration registered “Lamphun Brocade Thai Silk” with the Department of Intellectual Property for Geographical Indication (GI). The administration describes a relationship through: the migration of an ethnic group including aristocrats with a knowledge of weaving and group identity; and a revival of weaving by Royal princess Dara Rasmi (Department of Intellectual Property, 2010).



### D3 – Final version

Subject	Development process
<b>Criteria</b>	<ul style="list-style-type: none"> <li>▪ Principal material – cotton</li> <li>▪ Weaving technique – discontinuous supplementary weft or <i>chok</i></li> <li>▪ Practice of an ethnic group – Tai Yuan ethnic group of Thailand</li> <li>▪ Public recognition</li> </ul>
<b>Researcher's actions</b>	<p><b>Situation analysis:</b></p> <ul style="list-style-type: none"> <li>▪ According to research plan, it was the time to start case studies. Yet the criteria were not in the eyes of producers.</li> <li>▪ Three producers (in Chiang Mai, Phrae and Chiang Rai provinces) agreed to meet for a discussion about the research scope, research permission, and dates for visiting the production sites.</li> </ul> <p><b>Issues which needed deciding and acting upon:</b></p> <ul style="list-style-type: none"> <li>▪ Which producer to begin with? This question arose from a limited budget and time constraints for research.</li> <li>▪ The textiles of three producers were different.</li> <li>▪ What might constitute common themes and core values in these three cases? What should be included in the criteria?</li> <li>▪ There was a need for further research into additional producers whose textiles are similar.</li> </ul> <p><b>Actions:</b></p> <ul style="list-style-type: none"> <li>▪ <i>Recapitulate information</i> about dominant aspects of traditional textile production (including patterns (folk, tribal, royal); dye colours (natural, e.g. indigo, and chemical); handlooms and devices; weaving techniques; materials (cotton, silk); weavers' ethnic backgrounds; other skills related to weaving (embroidery, sewing)) – and visualise these in a conceptual framework.</li> <li>▪ <i>Decide on which producers to begin with</i> – The group in Phrae province was chosen based on textiles with ethnic identity, production relating to traditional methods and the reputation of the group leader who was granted the award of the national artist (2010), who is specialised in visual art (i.e. fine art and the art of hand-woven textiles). Appointments were made via telephone.</li> <li>▪ <i>A search for additional producers</i> via websites and informants found three more. When telephone enquiries were made, one refused, while the other two agreed to meet.</li> <li>▪ <i>Site visits</i> were conducted in:             <ul style="list-style-type: none"> <li>○ A textile studio in Muang district, Chiang Mai province (1 day);</li> <li>○ A textile community in Long district, Phrae province (3 days);</li> <li>○ A weaving school in Muang district, Chiang Mai province (1 day).</li> </ul> <p style="margin-left: 40px;">This led to permission to do research and to discuss about their availability and schedules of local activities, which was useful for research planning.</p> </li> <li>▪ <i>The attributes of these textile communities</i> were compared, and common themes and differences were discovered and confirmed by experts in the field. This led to the finalisation of selection criteria, and the selection of the weaving communities to conduct in-depth case studies. (One company was not chosen because it used a different weaving technique (<i>ikat</i>).<sup>17</sup></li> </ul>

<sup>17</sup> *Ikat* is a weaving technique that includes dyeing bundles of threads to create textile patterns in a weaving process prior to weaving. In Thailand, *ikat* is regarded as a technique commonly practised by the Lao-Tai ethnic group; a majority of whom reside in the northeastern region. The *ikat* weaving technique arrived in northern Thailand via the migration of people and skills (Cheesman, 2012). A difference was also found in a focus on tourist and export markets.

## Appendix – E

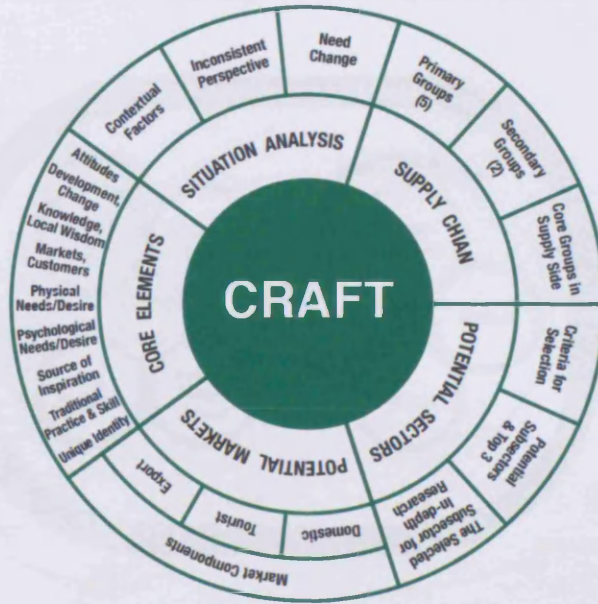
### Visualizations of the research findings resulting from semi-structured interviews

This relates specifically to Chapter 7, Findings from Semi-structured Interviews. The visualizations of information about the handicraft enterprises of northern Thailand in relation to *design for sustainability* comprised 14 visual units as follows:

- 1 Analysis of the handicrafts sector of northern Thailand and its elements
- 2 Call for change and development in the handicrafts sector of northern Thailand
- 3 Factors involved in the handicraft enterprises of northern Thailand
- 4 The supply chain of handicrafts of northern Thailand and the key players
- 5 Three handicrafts with strong potential for development for long-term viability and selection criteria
- 6–8 Potential markets and market components
- 9 Core elements necessary for the viability of handicraft production
- 10–11 Possible areas and directions for the development of handicrafts sector
- 12–14 Sustainability and design in the context of handicraft enterprises

# Analysis of the Handicraft Sector

A Framework of the Handicrafts Enterprises & Design for Sustainability: Case Study of Thailand



Developed by: Desya Chudsen, dchudsen@yahoo.com, 6 November 2013

## Change Needed

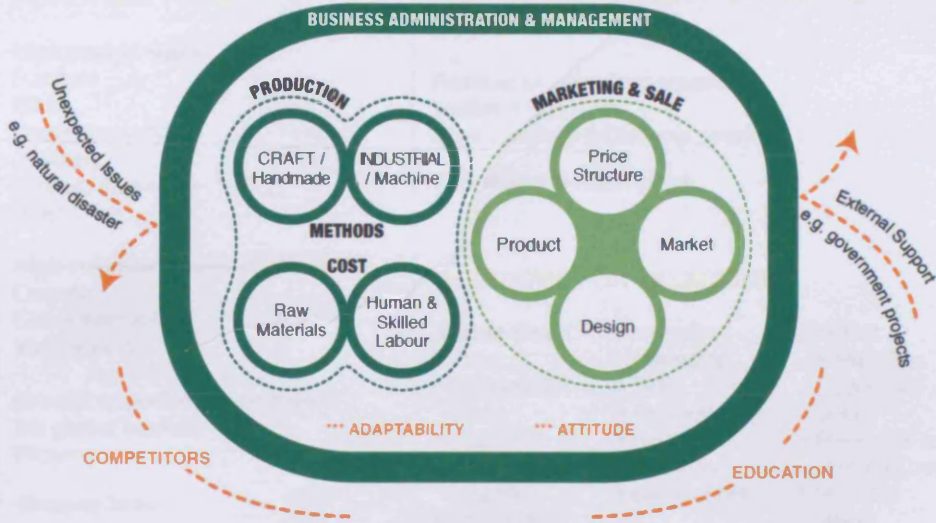
A Framework of the Handicrafts Enterprises & Design for Sustainability: Case Study of Thailand



Developed by: Desya Chudsen, dchudsen@yahoo.com, 6 November 2013

# Handicrafts Enterprises & Contextual Factors

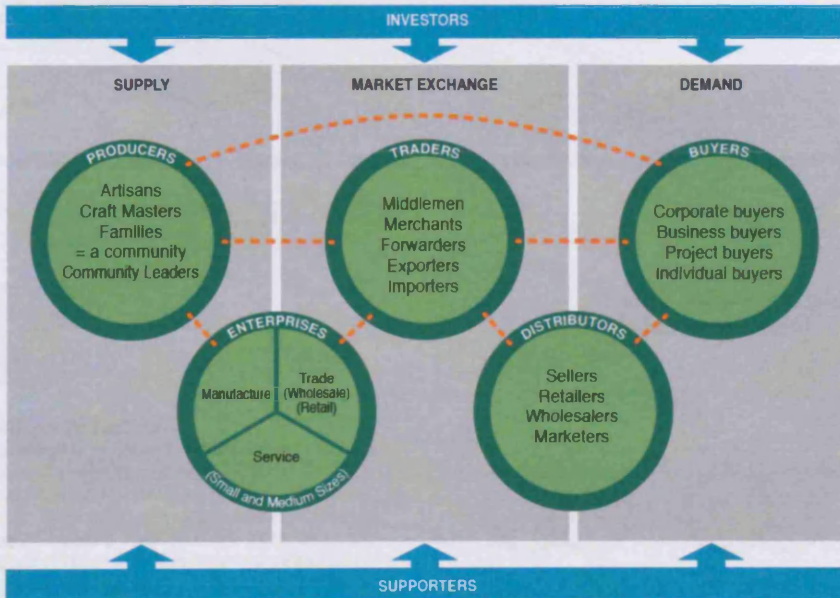
A Framework of the Handicrafts Enterprises & Design for Sustainability: Case Study of Thailand



Developed by: Deena Chudat, dchudat@yahoo.com, 6 November 2013

# Supply Chain & Key Players

A Framework of the Handicrafts Enterprises & Design for Sustainability: Case Study of Thailand



Developed by: Deena Chudat, dchudat@yahoo.com, 6 November 2013



# Potential Products & Top-3 Products

A Framework of the Handicrafts Enterprises & Design for Sustainability: Case Study of Thailand

## POTENTIAL PRODUCTS

### High market share:

- Furniture
- Gifts
- Home decoration
- Jewellery\*
- Textiles / Garments
- Toys\*

### High volumes of export goods:

- Carpets
- Celebration items
- Yarn products

### Greater opportunities to enter the global market:

- Wickerwork

\*Frequently traded

## PRODUCTS WITH MOST POTENTIAL\*\* (Top 3)

- Furniture (wood & fibrous plants)
- Textiles & Garments
- Silver Jewellery & Costume Jewellery

\*\* i.e. for export & tourist markets

## \*\*CRITERIA FOR SELECTION

### Market Share

- Price
- Frequency of trade
- Legislation of destination countries
- Competitors

### Production Capacity

- Skill
- Technologies
- Raw materials
- Labour cost

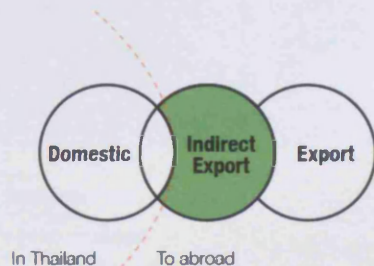
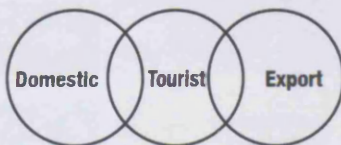
### Product Feasibility

- Good price point
- Relevance to everyday use
- Practical usage

Developed by: Design Crutcher, dcrutcher@yahoo.com, 6 November 2013

## Three Main Markets

A Framework of the Handicrafts Enterprises & Design for Sustainability: Case Study of Thailand



Tourism plays a vital roles in the distribution of handicrafts.

### Giving priority to the market(s)

Since the number of orders for export and foreign tourists have decreased, due to the global economic recession and political unrest in Thailand. Inevitably, some handicraft enterprises have recently focused on regaining or building market share from domestic sales. Market components that hold *high potential* for Thai handicrafts are summarised in the next page.

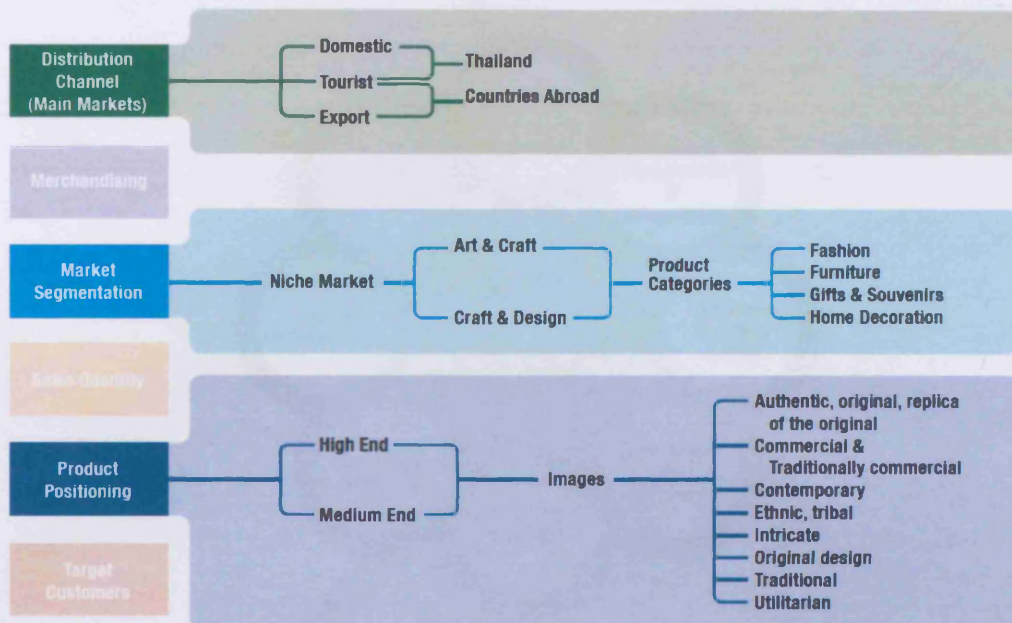


Developed by: Design Crutcher, dcrutcher@yahoo.com, 6 November 2013

# Market Components\* (1)

\*That hold **high** potential for Thai handicrafts.

A Framework of the Handicrafts Enterprises & Design for Sustainability: Case Study of Thailand

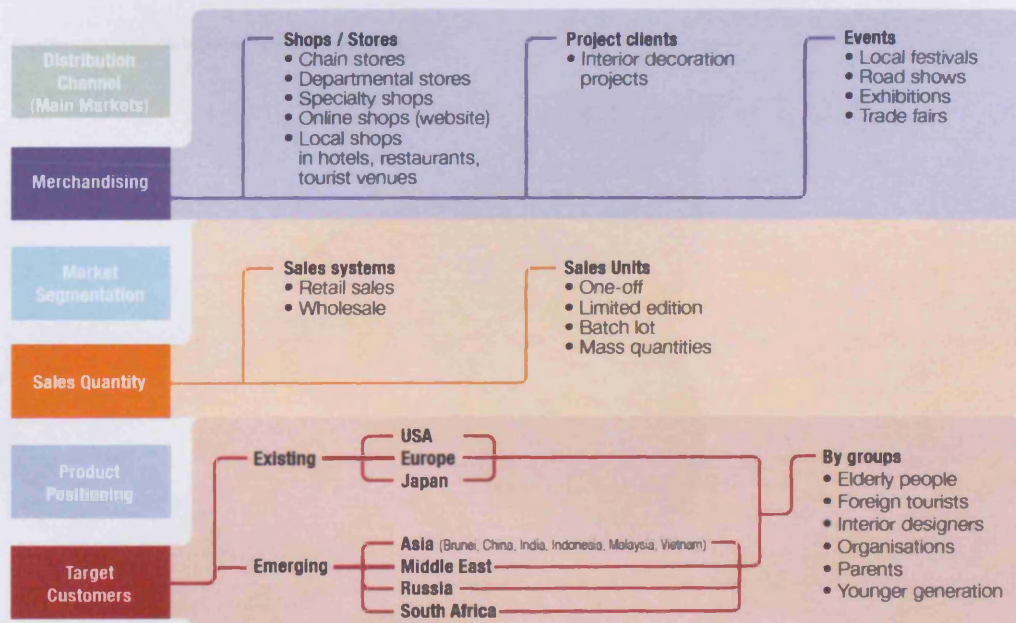


Developed by: Deaja Chudsen, dchudsen@yaho.com, 6 November 2013

# Market Components\* (2)

\*That hold **high** potential for Thai handicrafts.

A Framework of the Handicrafts Enterprises & Design for Sustainability: Case Study of Thailand



Developed by: Deaja Chudsen, dchudsen@yaho.com, 6 November 2013

# Core Elements of Handicrafts

A Framework of the Handicrafts Enterprises & Design for Sustainability: Case Study of Thailand

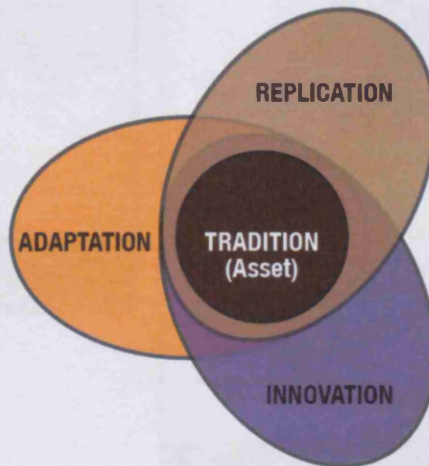


Developed by: Design Orchard, dchudatun@yahoo.com, 6 November 2013

# Directions for Sustainable Development

A Framework of the Handicrafts Enterprises & Design for Sustainability: Case Study of Thailand

Directions for sustainable development of the handicrafts production

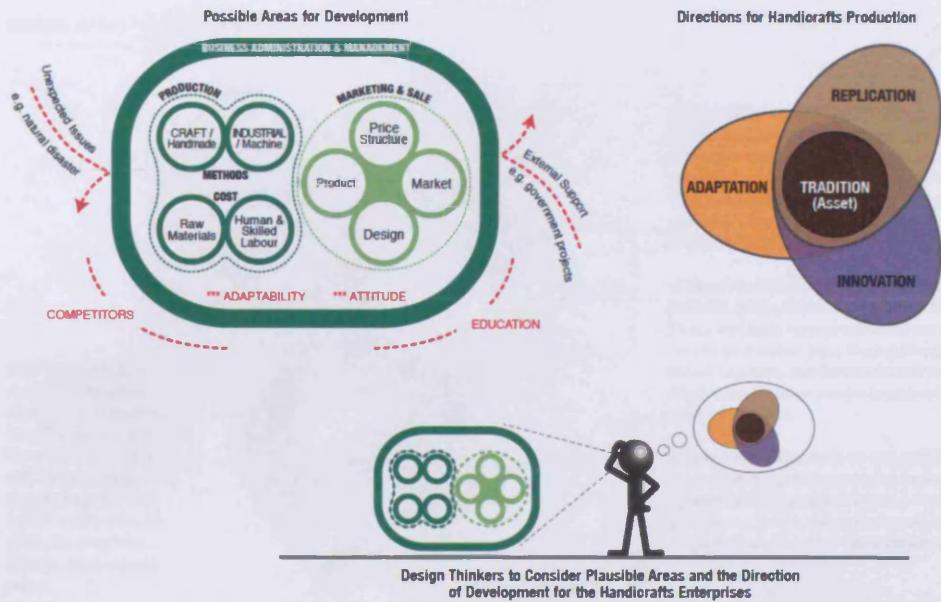


Developed by: Design Orchard, dchudatun@yahoo.com, 6 November 2013



# Areas & Directions for Development

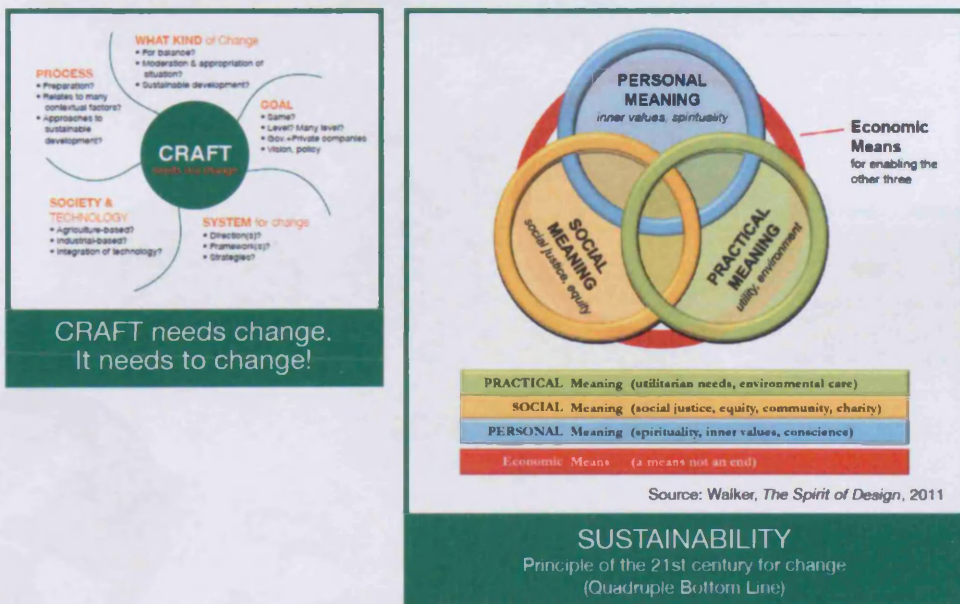
A Framework of the Handicrafts Enterprises & Design for Sustainability: Case Study of Thailand



Developed by: Daisya Chudist, dchudist@yahoo.com, 6 November 2013

# Craft in the 21st Century: Moving Towards Sustainability

A Framework of the Handicrafts Enterprises & Design for Sustainability: Case Study of Thailand



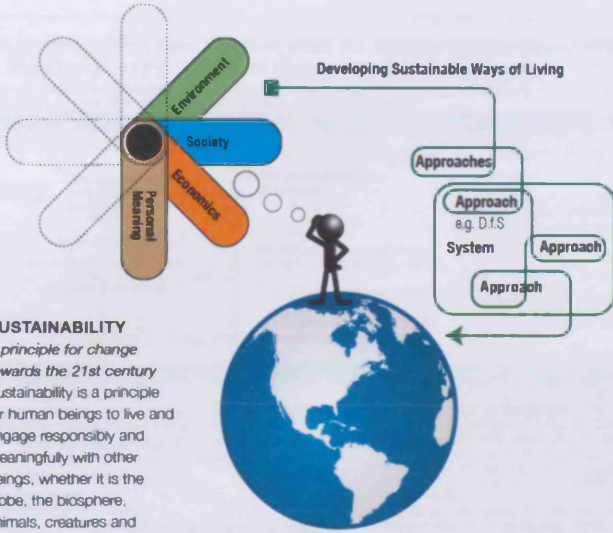
Developed by: Daisya Chudist, dchudist@yahoo.com, 6 November 2013



# Sustainability, Development & Design

A Framework of the Handicrafts Enterprises & Design for Sustainability: Case Study of Thailand

## VARIABLE ASPECTS OF SUSTAINABILITY



**SUSTAINABILITY**  
*A principle for change towards the 21st century*  
 Sustainability is a principle for human beings to live and engage responsibly and meaningfully with other beings, whether it is the globe, the biosphere, animals, creatures and people.

**SUSTAINABLE DEVELOPMENT**  
 People are to put sustainability principle into practice in everyday life at different levels of engagement, whether as individuals, part of a community or business corporation and so on in the context of a rapidly developing world with limited resources.

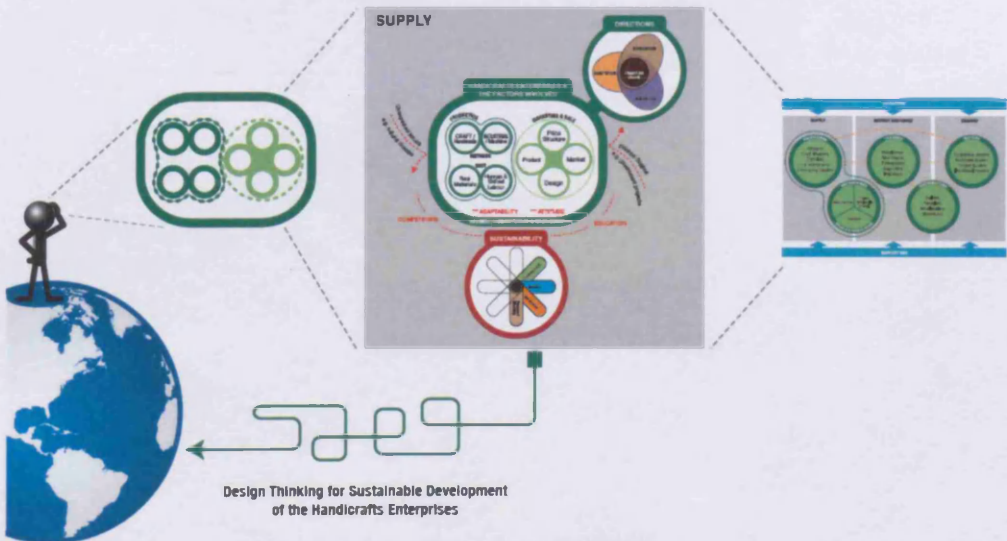
In the context of sustainability, design, especially industrial design, is seen as having two facets. Design can badly damage the biosphere and people; on the other hand, it can generate less impact on society and the environment through the process of design and the creation of a sustainable culture.

In developing sustainability for everyday practice, much more comprehensive and accurate approaches and systems are required and these challenge us to take determined action. Design for sustainability is part of this development.

Developed by: Design Chudat, dchudat@yaho.com, 6 November 2013

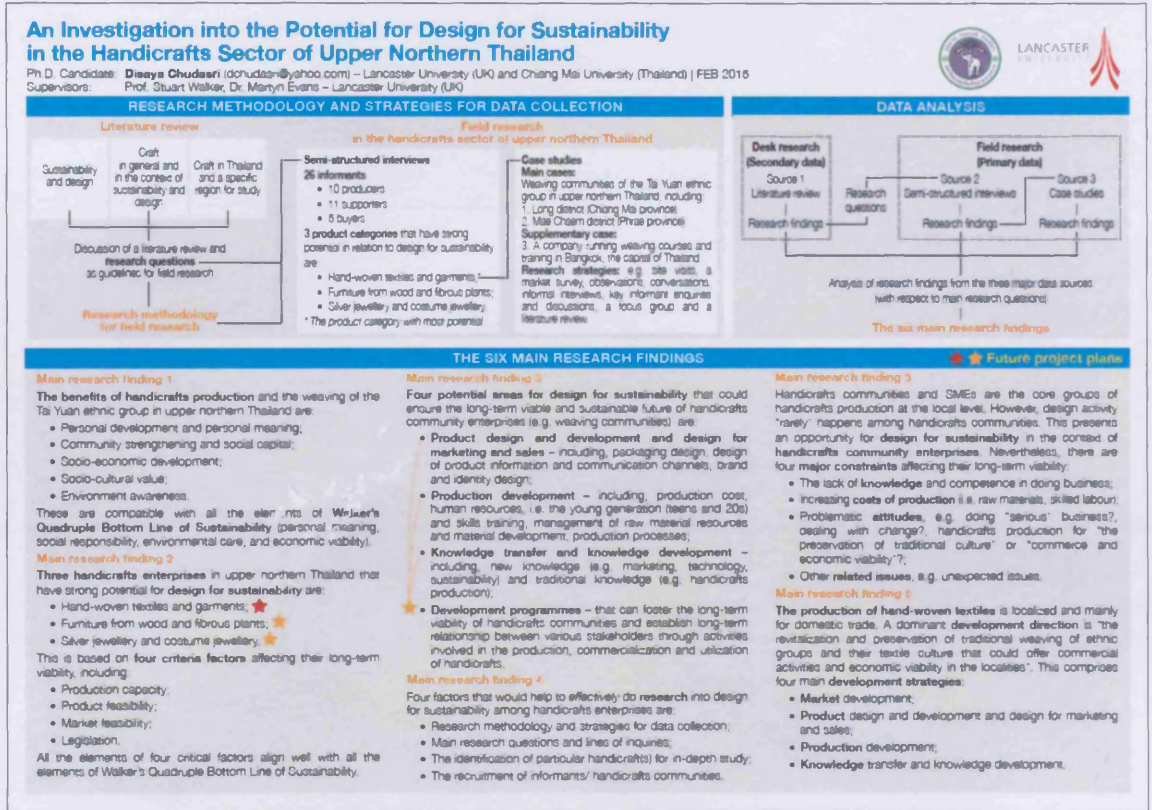
# Design Thinking for Sustainable Development

A Framework of the Handicrafts Enterprises & Design for Sustainability: Case Study of Thailand



Developed by: Design Chudat, dchudat@yaho.com, 6 November 2013

## A poster of the main research findings from this study



#### THE SIX MAIN RESEARCH FINDINGS

Main research finding 1

The benefits of handicrafts production and the weaving of the Tai Yuan ethnic group in upper northern Thailand are:

- Personal development and personal meaning;
- Community strengthening and social capital;
- Socio-economic development;
- Socio-cultural value;
- Environment awareness.

These are compatible with all the elements of Walker's Quadruple Bottom Line of Sustainability (personal meaning, social responsibility, environmental care, and economic viability).

Main research finding 2

Three handicrafts enterprises in upper northern Thailand that have strong potential for design for sustainability are:

- Hand-woven textiles and garments; ★
- Furniture from wood and fibrous plants; ★
- Silver jewellery and costume jewellery; ★

This is based on four criteria factors affecting their long-term viability, including:

- Production capacity;
- Product feasibility;
- Market feasibility;
- Legislation.

All the elements of four critical factors align well with all the elements of Walker's Quadruple Bottom Line of Sustainability.

Main research finding 3

Four potential areas for design for sustainability that could ensure the long-term viable and sustainable future of handicrafts community enterprises (e.g. weaving communities) are:

- Product design and development and design for marketing and sales – including, packaging design, design of product information and communication channels, brand and identity design;
- Production development – including, production cost, human resources, i.e. the young generation (teens and 20s) and skills training, management of raw material resources and material development, production processes;
- Knowledge transfer and knowledge development – including, new knowledge (e.g. marketing, technology, sustainability) and traditional knowledge (e.g. handicrafts production);
- Development programmes – that can foster the long-term viability of handicrafts communities and establish long-term relationship between various stakeholders through activities involved in the production, commercialization and utilization of handicrafts.

Main research finding 4

Four factors that would help to effectively do research into design for sustainability among handicrafts enterprises are:

- Research methodology, and strategies for data collection;
- Main research questions and lines of inquiries;
- The identification of particular handicraft(s) for in-depth study;
- The recruitment of informants/ handicrafts communities.

Main research finding 5

Handicrafts communities and SMEs are the core groups of handicrafts production at the local level. However, design activity "rarely" happens among handicrafts communities. This presents an opportunity for design for sustainability in the context of handicrafts community enterprises. Nevertheless, there are four major constraints affecting their long-term viability:

- The lack of knowledge and competence in doing business;
- Increasing costs of production (i.e. raw materials, skilled labour);
- Problematic attitudes, e.g. doing "serious" business?, dealing with change?, handicrafts production for "the preservation of traditional culture" or "commerce and economic viability"?
- Other related issues, e.g. unexpected issues.

Main research finding 6

The production of hand-woven textiles is localized and mainly for domestic trade. A dominant development direction is "the revitalization and preservation of traditional weaving of ethnic groups and their textile culture that could offer commercial activities and economic viability in the localities". This comprises four main development strategies:

- Market development;
- Product design and development and design for marketing and sales;
- Production development;
- Knowledge transfer and knowledge development.

★ ★ Future project plans