2.3 Bhutan
The Kingdom of Bhutan, also known as ‘Land of the Thunder Dragon’, is a small Buddhist kingdom located in South Asia bounded by Tibet/China on its northern borders and to the south, east and west by India (Figure 3). The total land area is about 47,000km$^2$, making it comparable in size to Switzerland (Aris, 1994[b]; Wangdi, n.d.).

Figure 3: Location and Map of Bhutan and Surrounding Regions (Maphill.com)

2.3.1. History
In Dzongkha (the official Bhutanese language), ‘Bhutan’ is known as ‘Druk yul’ (the Land of Thunder Dragon), and was founded by Shabdung Ngawang Namgyel (1594 - 1651) in 1616. It was not until the early 1900s that this region was again consolidated under Ugyen Wangchuck (1862 -1926) (Aris, 1994[b]). He founded the Wangchuck Dynasty and was crowned the first Druk Gyalpo (Dragon King). From then on, Bhutan was ruled by a succession of Druk Gyalpos who are his descendants.

Notably, the modernization of Bhutan was initiated by the third Druk Gyalpo - Jigme Dorji Wangchuck (b.1929 – d.1972) and was intensified by the fourth Druk Gyalpo - Jigme Singye Wangchuck (b.1955). He expanded upon his father’s legacy by modernizing Bhutan’s self-imposed rural medieval agricultural economy into a modern system (Goldsmith, 2012).

In 2001, the fourth Druk Gyalpo advocated for a formalized constitution and democracy. The Constitution of Bhutan was enacted on 18 July 2008 and democratic elections were held for the first time transferring political power from the monarchy to
its people. Today, Bhutan is a constitutional monarchy where the power of the state is
divided between the monarchy, the government and the monastic body. The fifth Druk
Gyalpo - Jigme Khesar Namgyel Wangchuck (b.1980) is currently the Head of State
and he has further intensified his grandfather and father’s modernization programmes
with Bhutan enjoying one of the fastest economic growth rates in South Asia (National
Statistics Bureau, 2011).

2.3.2 Geography, Climate, Flora and Fauna, Population and Demography
Bhutan’s landscape is diverse ranging from sub-tropical plains (at 200m elevation) in
the south to sub-alpine slopes in the north (more than 7,000m in altitude) with an artic
type climate. In between, the land consists mostly of steep and high mountains
crisscrossed by a network of swift rivers and steep valleys (Wangdi, n.d.). Bhutan
experiences five distinctive seasons: summer, monsoon, autumn, winter and spring

Bhutan is one of the most bio-diverse countries in the world with more than 72% of the
country covered in natural vegetation (Wangdi, n.d.). In keeping with the country’s
Buddhist philosophy, the Constitution mandates that a minimum of 60% of the
country’s natural vegetation is and will continue to be protected (Royal Government of
Bhutan, 2008).

There are three main ethnic groups residing in Bhutan, they are: Sharchops from the
east, Ngalops from the west and the Lhoshampa from the south. In addition, numerous
isolated minority groups live on the mountain fringes and in the jungles all around the
country including Tibetan communities who arrived during 1950s and 60s (Aris,
1994[a]). In 2005, there were a total of 672,425 inhabitants (Office of the Census
Commissioner, Royal Government of Bhutan and UNFPA, n.d.).

2.3.3 Religion and Culture
Today, Bhutan is the only Mahayana Buddhist Kingdom with 70% of the population
practicing Buddhism. Buddhist philosophy permeates all strands of secular life
influencing the cultural, ethical and sociological development of the country (Rinzin,
2006). Importantly, Bhutan’s economy is also built upon Buddhist spiritual values,
manifested in the concept of Gross National Happiness (GNH) (Centre for Bhutan
Studies, n.d).
Social propriety in Bhutan and the cultural code are based on Buddhism defined through Driglam Namzha, which is translated as ‘the way’ (lam) of ‘conscious’ (namzha) ‘harmony’ (dri) (Ura, 1994). Developed by Shabdung Ngawang Namgyel as a means to differentiate itself from Tibet, Driglam Namzha formally outlines all cultural forms, expressions and behaviour such as dress, etiquette, protocol, social rules, arts and architectures. Although this code could be seen as rigid and disciplinary in nature on the individual, at a macro level, Driglam Namzha promotes a well ordered and harmonious society while providing the country with a clear and concise cultural identity (Hutt, 2005).

• Bhutanese National Dress

Driglam Namzha defines the national dress of Bhutan as the ‘gho’ for men and ‘kira’ for women (Figure 4). The gho is a male knee-length robe tied with a belt forming a pouch at the waist. Women wear the kira, a large rectangular cloth that is folded around the body, held together by brooches at the shoulders and belted at the waist forming an ankle length dress. A silk blouse – wonju – is worn under the kira while a short jacket – toego – is put over the kira (Myers and Bean, 1994).

The discussion about the mandatory wearing of national dress started in 1973 and on 16 January 1989, the fourth King issued a decree (kasho) making wearing the national dress mandatory. Those flaunting the rule would be subjected to one month’s imprisonment. Today, the national dress must be worn when visiting the dzongs (fortress housing government offices and monasteries) and for all public and formal occasions. Everyone from members of the Royal family to ordinary citizens have to observe this decree except those operating modern machinery and those working outside the country (Hutt, 2005).
Additional accessories are needed to mark the formality of the event/space. Men need to wear a kabney – a large scarf (90 x 300cm) – draped across the left shoulder to the right hip. Different colours of kabneys signify a person’s status. Women have to wear a rachu – a narrow embroidered cloth draped over the left shoulder (Myers and Bean, 1994).

However, because of developments carried out in the last 50 years, modernization has irrevocably changed the cultural fabric of Bhutan. Today, the younger generation is abandoning traditional dress in favour of jeans, T-shirts and tattoos. Quoting Tshering Tobgay, MP, at that time of the main opposition group, the People’s Democratic Party: ‘It is us Bhutanese ourselves who are now putting our traditions and culture at risk’ (The Canberra Times, 2012).

Therefore, ‘as Bhutan opens up to the world it will have to tread carefully and choose what to preserve and what to sacrifice in order to modernize but safeguard its culture...With the era of globalisation, it will have to choose how much to give and take’ (Joseph, 2012).
2.3.4 Development Framework and GNH

The concept of happiness as a foundation of governance dates back to a 1729 legal code that states ‘if the government cannot create happiness (dekidk) for its people, there is no purpose for the government to exist’ (Ura and Alkire, 2012, p6).

The concept of GNH was created by the fourth Druk Gyalpo as a means of guiding economic development and establishing an economic model that is uniquely based on Bhutan’s culture, environment and Buddhist principles. Today, the Constitution of Bhutan (2008, Article 9) directs the State ‘to promote those conditions that will enable the pursuit of Gross National Happiness’ (Royal Government of Bhutan, 2012).

The four pillars of GNH are:

- Promotion of sustainable development;
- Preservation and promotion of cultural values;
- Conservation of the natural environment and,  
- Establishment of good governance.

The physical manifestation of GNH, through the GNH Commission, is evident in its economic policy that is based on Green Growth (developed in 2010). Although the craft sector, notably Bhutanese hand-woven textiles, is not specifically mentioned within this plan, the sector permeates itself through various growth areas such as in the forest and bio-diversity sector (natural dyes), high value / low impact tourism (crafts and souvenirs), clean production technologies (manual looms) and knowledge-based enterprises (cultural industry).

2.3.5 Economy and Economic Crisis

Bhutan’s recent economic growth can be attributed to its geography, which is blessed with mountain rivers, enabling the harvesting of hydropower. Gross Domestic Product (GDP) in 2006 was US$897 million. By 2010, it had grown by 78% to US$1.584 billion (Royal Government of Bhutan, 2012).

Yet, 29% of the rural population and about 2.5% of urbanites live under the poverty line (Goldsmith, 2012). Moreover, because of Bhutan’s limited capacity and resources, the country imports everything (including daily necessities, technical tools and machineries, commercial products and labour) from India. Therefore, the revenue generated by
hydroelectric sector is almost cancelled by the expenditure the country incurs (Gyeltshen, 2013). In order to respond to this increasingly critical situation, new areas of growth need to be explored. The Royal Government of Bhutan has identified the cultural industries sector as one possible growth area.

2.3.6 Cultural Industries
Bhutan 2020: A Vision for Peace Prosperity and Happiness (Planning Commission, 1999) advocates that it is important for Bhutan to maintain a distinctive path of development centering on Bhutan’s cultural foundation. Cultural industries are based on cultural assets producing tangible or intangible artistic and creative outputs which are consistent with Bhutan’s GNH development philosophy.

The hand-woven textile sector is one of the strongest pillars of this industry as it is founded on cultural and heritage knowledge and the skills and resources of its community. Furthermore, the requirement that all Bhutanese citizens wear traditional dress generates an instant demand for Bhutanese cloth that drives the sector’s development. The increase in population (about 1.8% in 2005 according to National Statistics Bureau) has also secured the sector’s long term growth.

2.3.7 Textiles Industry
The current context of the Bhutanese hand-woven textile sector can be comprehended through two major studies. They are:

- Bhutan’s Cultural Industries Sector Development: A Baseline Report 2009 (National Statistics Bureau and Department of Culture, Ministry of Home and Cultural Affairs, 2009);
- Bhutan Weaver Survey 2010: The Report 2013 (National Statistics Bureau and Department of Culture, Ministry of Home and Cultural Affairs, 2013);

These studies found that in 2011, there were 64,000 weavers of whom more than 50% were based in the poorer eastern regions. The age of the weavers ranged between 15 and 50 years; most did not weave full time. The weavers produced a range of products including textiles for kiras, ghos and some more contemporary items such as scarves and shawls; the traditional items command higher prices than contemporary textiles products.
In 2011, weavers in Bhutan generated an estimated income of Nu149.88 million (approximate US$2.2 million) from selling traditional products, mostly sold from weavers’ homes. The importance of weaving, in spite of it being an informal activity, is as an important form of income generation for rural communities, contributing to a reduction in unemployment and mitigating against rural-to-urban migration (Choden, 2005; Pelden, 2007[a]; Lees, 2011).

2.3.8 Challenges of the Hand-woven Textile Sector
The challenges of the industry are:

- **Costs**
  A study comparing the cost of hand-woven textiles between Laos and Bhutan found that similar textiles cost four times more when produced in Bhutan. The high cost of Bhutanese textiles can be primarily attributed to the low productivity of the back-strap looms, which are not suitable for the large-scale commercial production of hand-woven textiles. Hence, demand outstrips supply. Other problems include the high cost of materials (yarns and dyes), the absence of value and supply chains, insufficient knowledge of dyeing techniques and yarn qualities; and the absence of systematic pricing for final products (Nuthall, 2008; UNDP Bhutan, 2008).

- **Machey Textiles**
  A consequence of the high cost of hand-woven Bhutanese textiles is that consumers have started to look for alternatives. Seeing this economic opportunity, the Machey community from Assam, India, living near the borders of Bhutan, started to weave textiles similar to Bhutanese textile designs, selling them in Bhutan (Dema 2008).

The Machey weavers use fly-shuttle looms that are more productive and efficient than the Bhutanese back-strap looms. The size of these looms enables kirases to be woven in one piece, rather than having two or three pieces stitched together at the edges as they are when produced on back-strap looms. The warp of the Machey textiles is a single yarn, usually in polyester, rather than the double-yarn, which is usually the case for Bhutanese hand-woven textiles. The cost of a Machey cotton strip kira textile is about Ngultrum (Nu)250 (US$4) while a similar piece in Bhutan would be priced at between Nu2,000 (US$30) to Nu4,500 (US$70) (Myers and Bean, 1994) if woven using a Bhutanese back-strap loom. Due to the cost, the practicalities (ease of maintenance) and
the fact that these textiles look similar to Bhutanese hand-woven kiras, Machey kiras are commonly worn as everyday wear by Bhutanese.

- **Design**
The designs and colour codes of traditional Bhutanese hand-woven textiles are very rigidly defined. As expressed by Gyalyum Sangay Choden Wangchuk, the Queen Mother, the Royal patron of Bhutanese hand-woven textiles: ‘In Bhutan, design is limited to colour combination and pattern motifs’ (Joseph, 2012). This has restricted the uses of Bhutanese textiles, with a certain degree of ‘non-versatility’ (Gyeltsen, 2002[b]).

- **Marketing to Non-Traditional Markets**
The low volume of sales of hand-woven textiles is another challenge facing the industry, especially in the non-traditional market sector. According to Claire Burket, a consultant, ‘One has to know the market and develop the products according to the needs of the market while retaining their originality’ (Choden, 2005).

- **Traditional verses Innovation**
Echoing the above view, Elizabeth Nana, a consultant from the Asian Development Bank, notes that the product cannot just be traditional but also needs to be adapted to different market segments (Choden, 2005).

Amy S Frey, a UN craft consultant agrees, ‘Without compromising traditional designs, there are means to make Bhutanese textiles more attractive and saleable in the international market.’ She advocates that different techniques such as pile weaving, block printing, embroidery and appliqué are blended with traditional Bhutanese hand-woven textiles to make them more attractive and interesting (Pelden, 2007[b]).

2.3.9 Addressing the Challenges
To combat these challenges, considerable development assistance has been poured into this sector. Leading the charge, Gyalyum Sangay Choden Wangchuck states, ‘The biggest challenge for Bhutan is to replace traditional techniques in crafts with modern technology without forgetting traditional skills and knowledge’ (Times of India, 2011).

Many institutions have been formed to assist in the development of this sector. These include national institutions such as National Institute of Zorig Chusum (NIZC) and
training centres set up by non-government organizations (NGOs) including National Handloom Development Centre (NHDC) based in Khaling, and the Royal Textile Academy (RTA) in Thimphu.

Among the many international development agencies present in Bhutan, United Nations (UN) agencies have been the most active in supporting the development of the Bhutanese hand-woven textile sector (Liebl, 2003; UNDP Bhutan, n.d. [a][b], 2007; UNIDO, 2008; WTO, n.d.).

- **The Bhutan SEAL**
  This programme is managed and executed by the Department of Trade (DoT) within the Ministry of Economic Affairs (MoEA) and supported by UNDP Bhutan. The objectives include establishing a standard of excellence, objectify a quality standard, encourage innovation, preserve traditional skills and knowledge, assist the marketing of Bhutanese crafts and provide training and support services.

  Although non-traditional crafts could be submitted for the SEAL, these crafts need to be ‘authentic’. However, DoT does not explicitly define what it means to be ‘authentic’ (Department of Trade, n.d.).

- **The Seal of Origin**
  The robust tourism industry has lead to rising demand for Bhutanese souvenirs. Similar craft products are being imported from Nepal, India and China, and these are often passed off as authentic Bhutanese products as the material cultures of these countries in the Himalayan region are the same. According to the APIC, as these imported products are cheaper than those produced in Bhutan, the livelihoods of Bhutanese artisans is being undermined as well as jeopardizing the integrity of Bhutanese handicrafts. Therefore, the Seal of Origin was set up as means to identify and inform buyers of their choices while promoting and safeguarding the authenticity and integrity of hand-made products made in Bhutan (APIC, n.d.).

  APIC, under the auspices of MoEA, was set up to administer the Seal of Origin programme in July 2011. One of the aims of the programme is to ‘authenticate wholly produced and/or substantially transformed products with the required minimum value addition done within Bhutan to help improve marketing capacity and contribute toward
building “Brand Bhutan”’ (APIC, n.d.). However, the seal is only a ‘benchmark for originality’ but does not specially define the criteria of ‘origin’ (APIC, n.d.).

- Other Institutional Support
One of the main recommendations in the Liebl report (2003) concerns the need for ‘adaptation of the traditions to contemporary demands, while retaining the unique Bhutanese spirit and aesthetic’ (p37). Interventions include the adaptation of traditional products, so that new products would have immediate market potential while documenting traditional designs so as to protect these designs.

Craft projects executed by various UN agencies have been based on these recommendations, such as creating an enabling environment through competitions to recognizing excellence in innovative weaving and designs of both traditional and pesar (new) textiles (Gyeltshen, 2002; Choden, 2003, 2004, 2005, 2007).

Complementing these initiatives, the National Institute of Design (NID) in India has planned to offer design interventions by teaching Bhutanese artisans on how to add value to their own textiles and convert them into accessories (Textile Review, 2012).

One of the most significant interventions concerned skills and technological interventions. In 2003, a joint weaving workshop was hosted by the Textile Museum with weavers from India to exchange ideas about weaving on large horizontal frame looms (Lees, 2011). In 2009, Laotian horizontal frame looms were introduced as a means to increase the efficiency of weaving and maintain consistent production (Handicraft Association of Bhutan, 2009).

2.3.10 Kira Textiles
The origin of the kira is vague and often conflicting because it is not mentioned anywhere in Bhutanese recorded history (Gyeltshen, 2002[a]). However, by the mid-19th to the 20th Century, weaving was widely practiced and this period is often considered the golden age of Bhutanese weaving. The weaving from that period was called ‘hingsham’ or ‘heart weaving’ as weaving was done at that time with great passion and dedication (Myers and Bean, 1994, p17).
• Royal Patronage
The Bhutanese royal family has always played an important role in boosting weaving. Various queens and princesses through the generations have established weaving centres all over the country. Even today, the practice of royal patronage is evident as various members of the royal family have set up organizations and acted as patrons to promote Bhutanese hand-woven textiles (Myers and Bean, 1994).

• The Fabric Society
The relationship between the Bhutanese and their textiles is intimate as it permeates into all aspects of life; every family is somehow connected with weaving, involving both genders (there is no prohibition on men weaving). Adams (1984) rightly described Bhutan as ‘the last surviving cloth-based culture in the world’ (p2), significant in both the sacred and secular realms (Bartholomew, 1985; Bolland, 1995; Burchard, 1995).

In terms of spirituality, textiles are essential in the practice of Buddhism as both the process and the end results express devotion (Stack, 1994). Textiles are also richly described in the folklore reaching into the minds of children with many tales filled with moral messages. The manifestation of weaving is further infused with symbolisms of life. For example, the act of weaving is emblematically associated with the act of reproduction and the giving of life (Myers and Bean, 1994). Secularly, Bhutanese textiles have always been the preferred state-gifts, and used as tools for diplomacy (Collister, 1987). Until the 1960s, textiles could also be used as payment for taxes and fines (Myers, 1995).

The Bhutanese often assess others based on what they wear; knowledge of weaving is able to give insight as to the quality of a kira, which reflects the social and economic status of the wearer. According to Myers and Bean (1994), if a person wears aikapurs or silk kiras, it means they are rich as these kiras are expensive and only the rich are able to afford them. Wealth for the Bhutanese is also measured according to the number and types of textiles they own; textiles, as family heirlooms, are often kept a ‘box of prosperity’ or ‘yanggam’. A woman’s social status may also be assessed by the length of her kira. A general rule of thumb states that the longer a kira, the higher the social status of the wearer.
It is imperative to dress appropriately, according to the context, that is, the occasion of the event and one’s position in the society. This is very important as social propriety is highly valued in Bhutan, a condition deeply ingrained through Driglam Namzha. A person’s social status can be enhanced or diminished by choosing the correct or wrong kira to wear for an occasion. Underdressing or overdressing could embarrass oneself, the host and others at an event. It is also important to dress according to one’s age. Mature women are expected to dress in sombre colours, in plainer fabrics with fewer motifs and simple designs. This is supposed to reflect the wisdom that comes with age - being less materialistic and more spiritual at the end of one’s life. On the other hand, young unmarried women are encouraged to dress more colourfully reflecting youthful energies and vibrancy (Myers and Bean, 1994).

The complexity of Bhutanese fabric culture can also be demonstrated through gift giving where textiles are the norm of exchange, governed by numerous rules and etiquette.

• Fibres and Yarns
Various types of fibres are used for weaving different types of textiles in Bhutan (Pomaret, 2003). These include cotton, wool, silk (raw and reeled), yak hair and nettle fibres. In the past, most were locally produced - cotton and silk are found in the subtropical and temperate zones, in the southern and eastern hilly regions. Sheep wool is the main fibre from central, western and eastern regions of the country (Myers and Bean, 1994). Historically, these fibres were all handspun into yarns (Gyeltshen, 2002[a]). Nowadays, most yarns are imported except for a very small percentage of spun silk and wool yarns that are produced locally.

• Dyes
In the past, Bhutanese weavers developed their own dye resources from their natural environment. The dye culture was highly developed and extremely sophisticated as noble families had their own specialist dyers to dye their own yarns. Dye formulas are highly valued and are considered a family secret, only passed down from mother to daughter, while the process of dyeing is steeped in cultural practice and taboos (Myers and Bean, 1994). Natural dyes include leaf, bark, flower, fruit, stem, root and mineral dyes (Tshering, 1996).
The introduction of commercial dyes from Europe in the 1880s to India and the border towns of Bhutan initiated the gradual erosion of dyeing practice. A century later, Bhutanese weavers were no longer practicing dyeing, as commercial yarns came pre-dyed (Myers and Bean, 1994).

- Transfer and Value of Weaving Skills
Bhutanese girls begin to weave at about seven or eight years of age by imitating older members of the family. The techniques used to weave motifs and designs are traditionally handed down orally by female members of the family. Weaving skills are highly valued, enhancing the prestige and status of women in Bhutanese society. In the past, it was a necessity while today it is a means of income generation (Gyeltshen, 2002; Lees, 2011).

- Weaving Process
In rural Bhutan, weaving is normally done after harvesting, during the winter months and school holidays (Lees, 2011; Bartholomew, 1985). Some processes are executed individually (such as designing textiles, indigo dyeing, warping) as required by tradition and belief while others are communal activities (Myers and Bean, 1994; Lees, 2011).

Whether woven on horizontal frame looms or back-strap looms, the process of weaving kira textiles always involves the following steps: purchasing, preparation and winding of yarns, setting up the warp onto the loom, weaving and finishing (Kuma, 1994).

- The Looms
All experts agree that Bhutanese textiles are generally woven on Horizontal Frame Looms or Back-strap Looms (Bartholomew, 1985; Adams, 1984; Myers and Bean, 1994; Stacks, 1994; Bolland, 1995; Prommart, 2003; Joseph, 2012).

**Horizontal Frame Loom**
In Dzongkha, the Horizontal Frame Loom is called ‘thrithag’ or ‘thaashi’ (Kuma, 1994, p135; Myers and Bean, 1994, p223). It was first introduced to Bhutan in the 1930s from Tibet and can be most commonly seen in western, central and north-east Bhutan. A diagrammatic representation of the loom is shown below (Figure 5) (Myers and Bean, 1994).
It is usually equipped with four shaft-frames and four treadles producing a diamond shaped twill weave called ‘bjichu mito’ or ‘little birds eye’ (Myers and Bean, 1994, p199; Kuma, 1994, p141). Such construction is mainly employed to weave narrow width manthra textiles while the plain twill is used to weave wider yathra textiles. If designs, motifs and patterns are to be featured in the textile, the discontinuous supplementary weft technique is employed (such as for mathra pesar and yathra).

Figure 5: Horizontal Frame Loom (Myers and Bean, 1994)

According to Kuma (1994), these looms produce narrow widths of cloth from 27 to 30cm (Kuma, 1994) but Myers and Bean (1994) found that cloth up to 60cm width was woven. Kiras woven on such looms may require between 7 and 13 vertical panels to be joined together to form a kira as shown below (Figure 6) (Myers and Bean, 1994).

Figure 6: Woolen Kira Joined Vertically (Myers and Bean, 1994)
Back-strap Loom

There are two types of back-strap loom in Bhutan; one is the ‘fixed vertical frame with back-strap’ while the second is the ‘fixed horizontal frame with back-strap’ (Pommaret, 2003, p89). The latter is usually operated by semi-nomadic herders because of its easy mobility while Bhutanese kira is woven using the former. The Bhutanese name for the back-strap loom is ‘Pangthag’, body or lap loom. It is usually made of wood, bamboo and metal. It is the strap that goes around the weaver’s back, which has given the loom its name (Stack, 1995; Adams, 1984; Myers, 1994; Kuma, 1994). A graphic representation of the back-strapped loom from Myers and Bean (1994) is seen below (Figure 7).

Textiles produced by back-strap looms are usually wider than those woven on the horizontal frame looms. Each kira panel is between 45cm and 65cm while the length of each panel is from 240cm to 270cm long. The Kiras made from textiles woven on back-strap looms are usually stitched together, warp wise, from two or more lengths of cloth (Kuma, 1994; Myers and Bean, 1994)

Figure 7: Back-strapped Loom (Myers and Bean, 1994)
• Form of Kira
A kira is a rectangular piece of textile. Regardless of whether it is woven on horizontal or back-strap looms, the size varies in accordance with the wearer’s body; the length of the kira is dependent on the girth of the wearer’s body as the kira needs to wrap around the body while the width of the kira is dependent on the height of the wearer. The average width of a kira is between 148cm and 180cm while the length is approximately between 240cm and 275cm.

The diagramme below (Figure 8) (Myers and Bean, 1994) illustrates the wearing of kiras woven on a back-strap loom. As the cloth is wrapped around the body, a wide pleat is created in front while the cloth ends at the back of the body (Myers and Bean, 1994, p93).

![Figure 8: Wearing a Kira (Myers and Bean, 1994)](image)

A typical kira of three panels consisting of the following elements is show in the next figure (Figure 9) (Baker, 1985, 2011):
- A - End border
- B – Side border
- Within each panel, there are:
  - a – Narrow band with dense design strips
  - b & d – Large geometric forms
  - c – Semi geometric forms
• Motifs, Patterns and Techniques
The motifs and patterns of Bhutanese kira textiles share certain similarities with those of neighbouring regions. Within Bhutan, before the 1970s, different regions in Bhutan had their own distinctive motifs and patterns. Because of the development of modern transportation and consequently, the movement of people between regions, the relationship between motifs, patterns and locality became more complicated and difficult to decipher. Names of patterns and motifs may still reflect their origins but they are no longer exclusive to the peoples of a particular region.

Sources of inspiration for motifs employed by the Bhutanese weavers vary from everyday objects such as the vase or bumpa (Figure 10) to those with religious significance, for example, the endless knot – a typical Buddhist symbol (Figure 11). Some designs are even borrowed from other cultures, for instance, the Chinese Wall or ‘Therpochay’ (Figure 12) is borrowed from a Chinese silk brocade design (janachari) (Bartholomew, 1985; Myers and Bean, 1994).
• Patterning Technique

Bhutanese weavers employ three major patterning techniques. They are: supplementary warp / extra warp design, also known as ‘hor’; and supplementary weft / extra weft design, within which there are two sub-divisions: Thrima and sapma.

Supplementary Warp / Extra Warp Design or Hor.

An extra yarn is added into the warp of the textiles in order to create patterns. The pattern is developed when the yarn is ‘floated’ on the top of the base textiles. The family of kira textiles using this means of surface decoration is called ‘aikarpur’ (Myers and Bean, 1994). Figure 13a (Myers and Bean, 1994), shows a weaver executing such a technique while Figure 13b (Myers and Bean, 1994) is a sample of supplementary warp design.
Supplementary Weft Weaving / Extra Weft Design

The method of weaving motifs and patterns on kira consists of inserting an extra weft yarn that floats on the top of the base textile. Bhutanese weavers use two different methods to create such extra weft designs – thrima and sepma.

- Thrima (See Figure 15 & 16) (Curious Weaver, n.d.). An extra weft is inserted into the ground weave and coiled around the warp to create a design. Because of the high density of the weft, thrima motifs and patterns appear to ‘float’ on the face of the ground weave while on the reverse side of the textile, there are no negative imprints. The effect of thrima is to make it look like embroidery constructed through chain and cross stitching (Myers and Bean 1994).
- Sapma (Figure 17) (Baker, 2011). The supplementary wefts are laid into the ground weft and appear to lie flat on the surface of the cloth. When not ‘floating’, these extra wefts are laid in with the weft of the ground weave and ‘disappear’ with no negative images on the reverse of the textiles.

![Figure 17: Pattern woven using Sapma technique (Barker, 2013)](image)

- Colour
Each type of kira has its own specific and strict colour grouping. Although the choice of colours of the kira is a personal and individual decision, Buddhist philosophical principles govern the choice. Wearing a garment that represents the colour of the astrological sign during significant occasions such as weddings will bring good luck to the wearer (Myers and Bean, 1994).

- Types of Kira
The classification of kiras is complex as kiras are differentiated according to how they are woven, the yarns used, the colours, construction technique, the usage and the designs on the kira. There are at least two dozen different styles of kiras (Bartholomew, 1985).

From the most basic to the most complex kira types, they are:

**Striped Kiras**
Although stripes are created by warp yarns, because of the way the textile is worn, stripes are always orientated horizontally, perpendicular to the body. Different names denote different coloured stripes. These are: yutham, shardang thara, jhadi chim, mentha and Tibetan Inspired strip textiles. Within this category, the sub-divisions are: hothra, hotha jalo and tarichem.
Plaid Kiras
Most of the plaid textiles are woven in southern and eastern Bhutan. If wool yarns are used, the plaid textile comes from central Bhutan and is woven on horizontal frame looms. Some common plaid textiles used for kira include sethra (including variations such as sethra dokhaha and dalapgi sethra), mathra, mathra pesar, pangtsi and shabthrawo.

Aikapurs Kiras
Originating from northeast Bhutan, aikapur is a cloth of distinction as it is only worn on special occasions and also used as special gifts. Aikapur is characterised by alternative bands of plain weave and supplementary warp patterns (hor), repeating across the width of the textile. Sometimes, within the plain weave band, weavers might add motifs woven with supplementary wefts. When worn, stripes are placed horizontally on the body of the wearer.

There are different types of aikapur kiras, mostly differentiated by their colour groupings. They are mense mathra, lungserma, jadrima, dromchu chema and montha.

Kushuthara
These are the most prestigious of all Bhutanese textiles because of their highly sophisticated and complex designs, which only highly skilled weavers are able to undertake; most motifs and patterns in kushutharas are woven using both thrima and sapma techniques. Therefore, it is also time consuming to produce with some taking up to two years to produce (Bartholomew, 1985). Coupled with the high silk content, the value is also very high, appealing to women with high status as an expression of their wealth.

Some of the different types of kushuthara are ngosham (blue background), jangsham (green background), napsum / naushem (black background) and mapsham (red background).

2.3.11 Innovation in Kira
Kira textiles with new and innovative designs that depart from traditional norms are called ‘pesar’ (Myers and Bean, 1994, p172). Various reasons are cited for innovation
in traditional kira designs. These include lowering the production cost by omitting design elements and enlarging motifs and patterns to create a less dense patterning.

In the 1980s, NHDC developed new kira patterns based on traditional supplementary weft motifs. In addition, they have also expanded traditional colour schemes to incorporate new colours including hot pink, yellow, peach and pale blue. These are often termed as ‘New Style Kiras’ (Myers and Bean, 1994).

The dimension of the kira has also changed over the course of time. The width of old kiras from the 19th Century was narrower than those made today. This is because women then wore their kiras much shorter. Also, kiras then had longer fringes. Kiras from the 1940s had fringes as long as 8cm or more while today, fringes hardly exceed two to three centimetres (Myers, 1995).

Another significant development of the kiras during the 1990s is the ‘half kira’. Instead of three panels, the half kira consists of only two panels. It is essentially a skirt, pleated like the traditional kira but instead of fastening at the shoulders, this new kira is fastened at the waist. A Bhutanese woman may wear a half kira with blouses, t-shirts or sweaters or with the traditional jacket over the blouse, closed in front with a brooch. This will give the illusion of wearing a full kira (Myers and Bean, 1994).

In conclusion, the traditional kira can be modified and changed in a multitude of ways. Yet, such innovations have continued to happen within the established formats of kiras (Myes, 1995; Adams, 1984).