Original Article ISSN (Online): 2582-7472

DESIGN INTERVENTION ON THE MOTIF PATTERNS OF "KAPDA GONDA" CRAFT OF DONGRIA KONDH TRIBE OF ORISSA

Twinkle Rastogi 1 🖾 🕩



Assistant Professor, Amity School of Fashion Design and Technology Department, Amity University Gwalior Madhya Pradesh and PhD Scholar, Fashion Design, Vivekanand Global University, Jaipur, India





Received 24 November 2022 Accepted 18 January 2023 Published 21 January 2023

CorrespondingAuthor

Twinkle Rastogi, trastogi@gwa.amity.edu, twinkle24rastogi@gmail.com

10.29121/shodhkosh.v4.i1.2023.268

Funding: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Copyright: © 2023 The Author(s). This work is licensed under a Creative Commons Attribution International License.

With the license CC-BY, authors retain the copyright, allowing anyone to download, reuse, re-print, modify, distribute. and/or copy contribution. The work must be properly attributed to its author.



ABSTRACT

India is a country with rich heritage of traditional textiles. It is a cluster of art and crafts of various communities and tribes. Tribal textiles are distinguished by their one-of-akindness, which reflects racial feelings and cultural identity. "Dongria Kondh" is a tribe from Odisha, lives on the hills of Niyamgiri, particularly on Rayagadha district. The importance of this community is that their arts and crafts reflect the importance of the mountains strain. The triangular design on the walls of the village and the colourful cloth embroidery they wear called "Kapda Gonda". The design for adornment of kapda gonda reflects with the ethnic identity. The research process includes ethnographic investigation to profile social and cultural importance of Kapda Gonda in the form of interview of artisans for the process and embroidery involved in "Kapda Gonda". The main purpose of the study is to provide training to the artisans to explore new ways of design intervention in the patterns of traditional motifs of Kapda Gonda to create awareness of their own craft flexibility within their community. With design intervention in Kapda Gonda motifs the artisans could make wide range of motifs for the modern society.

Keywords: Dongaria Kondh, Kapda Gonda, Design Intervention, Women Apparels, Motifs, Traditional, Patterns

1. INTRODUCTION

In the realm of textiles, India has a long and varied history. It is possible that it is the world's oldest textile tradition. Indian craft is well-known over the world for its beautiful craftsmanship and grandeur. Because of the great cultural legacy and ethnic diversity, a wide range of crafts using various materials, themes, and techniques have flourished in this nation.

Every state in India has their own distinct culture, with its own patterns, colours, materials used, designs and patterns that may be found in the handicrafts of the particular region. *Kashmir* is well-known for pashmina wool shawls, rugs, jewellery, ivory work, and other items as well. *Karnataka* is well-known for its rose wood carving, and *Rajasthan* is for engraved and enamelled *Meenakari* brassware, *Varanasi, and Kanchipuram* for their silk material. Some of the items include mirror work, colourful embroidery, fabric painting and quilting from Gujarat, Puri, and Bhubaneswar for stone carving. *Ganjam* for brass fish, *Dhenkanal and Rayagada* for tribal jewellery are some one-of-a-kind crafts from several states. Other areas are well-known for their crystals and semi-precious stones. Craft making is a prominent vocation in India today, with around 23 million people employed in the craft industry. However, in India, like in many other developing nations, it is the primary source of employment for the great majority of people.

Likewise, the visit to Khajuri village in the Rayagada region of Odisha was intended to improve expertise in the field of the craft. Odisha, often known as the "Country of Temples," is a land rich in cultural legacy. Odisha's main crafts are based on various religious and social ceremonies related with Lord Jagannath. As evidenced by their weekly markets, Odisha's varied tribal population in the western areas is a storehouse of living crafts. Rayagada (shown in Figure 1) has a total land area of 7580 square kilometres and came into existence on 2nd October 1992. It is a tribal district populated by 57.52 percent tribals, Population Census (2011) the primary tribal tribe being the Kondhas and Sauras. They inhabit in the blocks of Gunupur, Padmapur and Gudari. Khajuri "an entire new world a new experience and fantastic point of view no one to tell us no or where to go" a small village in Bissamcuttack Tehsil in the district of Rayagada, Odisha, India. It is located 46 KM towards north from the district headquarters Rayagada, 301 km from state capital Bhubaneswar. The village is administered under the tehsil Bissamcuttack. Khajuri post head office is Bissamcuttack. Population Census (2011) Kurli is the gram panchayat of khajuri village. The total geographical area of village is 558 hectares Population Census (2011). According to census 2011 information, khajuri has a total population of 598 people in which 256 are male and 342 are female there are about 147 houses in khajuri village Population Census (2011). Nearby villages are kurli, khambesi, bhatiguma, kandraguma, kurubelipadar, jangojodi, radonga, urusakani, gandili and sogadi (shown in Figure 1). Based on the baseline survey report of the year 2015, Khajuri has a total population of 387 people in which 177 are male and 210 are female, there are 86 houses in the village Conservation - Cum - Development Plan for Dangaria Kandha Pvtg, Dangaria Kandha Development Agency, Kurli, Chatikona (2016). "Dongaria Kondh" is a tribe from khajuri village, lives on the hills of Niyamgiri. There are two types of tribes live on this hill "Dongaria kondh" and "Kutia Kondh". The Dongaria Kondh live on the upper region of the Niyamgiri hills while the *Kutia kondh* in habitat the foothills. They worship the Dongar(mountain) from which the *Dongaria kondh* derive their name, along with the Dharini(earth). They address the dongar as Niyam Raja and dharini as Dharinipenu. They believe that these male and female principles come together to grant the *Kondh* prosperity, fertility, and health. The Dongaria kondh is a very unique community whose distinctive identity is evident in the language, expertise in agro-forestry and customary practises. The kondh tribe speak two languages namely "kuyi" and "kuvi", vocabulary which is completely unrelated to odiya, the state's official language. Women of the *Dongaria kondh* tribe wear a white sari with red border which is called "Dhalaluga". They do not wear blouse; they only drape the one piece of white cloth in a very easy way. They wore an embroidered shawl named kapda gonda, which is the main subject of study. The Kondh men wear white dhotis without any

pattern like *Dhalaluga*. They are living in *dongors* which is very much greenish if they will wear white sari then they can be recognised easily. Now a days the *dongaria* man started wearing shirt and trouser, influenced by the people around the foothills of the *dongor*.

Research through practice-oriented research is synonymous with research in the field of the fine arts, particularly with reference to the craft related study. The studio-based research method starts with the research process from finding the research material, the sketch, the development of the idea, the basic drawing and up to the artwork. finale as a painting, statue, craft and print of a new dimension, or art installation. To do this, artists, painters, art producers, sculptors and art educators should prepare their self-research workbook for documentation purposes Sumardianshah Silah (2013). Among these examples of research methods are the author observation towards this craft while visiting the *khajuri* village. To study the culture of the tribe the author had to live with the tribe. Accordingly, the process of development of shawl and its embroidery has been documented.

Figure 1

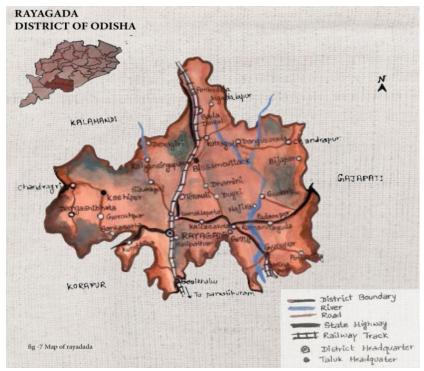


Figure 1 Map of Rayagada District and its Nearby Villages **Source** (Sketched by the Author)

2. AIMS AND OBJECTIVES OF THE PAPER

- 1) This paper is based on the artisan's observation and knowledge made on the different motifs used in *Kapda Gonda* Shawls.
- 2) The aim of the study is to provide training to artisans for the design intervention on traditional motifs patterns of *Kapda Gonda* Shawls.

3. LIMITATIONS OF THE STUDY

The Study is Limited to "*Dongria Tribe*" of Kapda *Gonda* Craft of Orissa. The design intervention is done in the traditional motifs itself.

4. REVIEW OF LITERATURE

Study on the research papers which has already been done in the field of the relevant study of *Dongaria Kondh* Tribe and their craft.

Behera (2018) has documented the *dongaria* urge and willpower to preserve their age antique traditions alive thru the creative expression inclusive of their idealistic characteristic. While this paper additionally explores the dimensions of cultural importance of the two PVTG tribes i.e *Donagria Kondh* and *Juang* with its persistence to their contemporary changing situation. The study was based on the museum documentation with no dates mentioned of it in, there was no direct interaction with the tribes and lack of in-depth study. Case study of *Kapda Gonda* shawl was limited in terms of their techniques, motifs, and colours narrations.

Panda (2018) has conducted the study which represents the design and style of the *Dongria* Condo. Accessories worn by these male and female tribes. The concern study only discusses on the ornamentation of the *Dongria Tribe*, but no importance has been given to *Dongria Shawl* as it is considered one of the traditional accessory of the women in tribe to wear it over the sarees.

According to Sanghamitra Sethi (2020) study focused on the comparison of various psychological, sociological, or cultural factors in order to assess the similarities or diversities occurring in two or more different cultures or societies of Tribes of *Dongria Kondh*. Cultural Importance of *Kapda Gonda* along with the significance of their colours which shows the major role of nature importance as a god in their community. Importance of Dongria women in the development of the shawls which is the truly work of women and girl. DKDA provides number of facilities to upgrade the status of *Dongria Kondh* in various sectors like education, health, and livelihood. The study does not include any innovative measures to enhance the creative aspects of the crafts with reference to its cultural importance. Sinorita Dash (n.d.) has conducted a study on the analysis and discussions for survival and revival of endangered PVGTs tribal groups which are *Bonda*, *Birhor*, *Chukotka Bhunjia*, *Didayi*, *Dongria Kondh*, *Hill Kharia*, *Juang*, *Kutia Kondh*, *Lodha*, *Saora / Lanjia Saora and Paudi Bhuyan*.

Shobha (2017) created modern silhouettes like jackets, crop tops, palazzo trousers, and one-piece dresses, the designers obtained these shawls from an NGO that works to improve these communities. Along with the cotton shawl, Khadi and woollen yarns for the needlework have both been employed in the collection. For the collection, the cultural heritage of Odisha serves as the source of inspiration for the collection known as Modern Tribals. This study has focused on the development of fusion wear garments along with the introduction of khadi fabric and woollen yarns in it.

5. RESEARCH GAP

All the above study analyzed the basic features of the tribe *Dongaria Kondh* about their cultural activities, traditions, beliefs, agricultural background. As there are no such research papers are available as per the design intervention or motifs creation of dongaria shawl, mainly the papers are available for the training of women and community upliftment. Study on the costumes and accessories has been done as a means of data collection or to focus women of the tribe or government schemes for these tribes. No taking forward of the *kapda gonda* in any form of design intervention has been seen in the above given study. So, author has focused on new introduction/intervention in the motif patterns on *kapda gonda* which provide a

new platform and awareness for artisans to explore their own motifs in various forms of development, repeats and placements without disturbing their traditional beliefs.

6. MATERIALS AND METHODS

First-hand Information is collected through field work and in-depth interview with Informants which were the artisans from the tribes regarding embroidery and weaving of the shawl. The technique used is Participatory Method as the local people of *khajuri* and *dongaria* tribe participated in providing the required information with respect to the motifs used in the *kapda gonda*. Practised based research was implemented in the documentation of the craft research through the tribe participation and interview and also authors observation in the field.

Studio based research method was implemented in the development of new idea for sketches of design intervention in the motif patterns of *kapda gonda*.

7. ANALYSIS AND DISCUSSION

The shawl embroidered by the ladies of *Rayagada* district's *Dongaria kondh* tribe and worn by them is unique to the present region. The *Dongaria Kondh* tribe's women embroidered a shawl known as *Kapda Gonda* which they wear over a white saree with a red border, this saree might be a single length of material wrapped across the top and lower half of the body and complimented by one scarf worn around the waist and the other draped around the chest (shown in Figure 2 & Figure 3) This shawl is woven in basket weave first, then embroidered. The shawl measures 2 x 5 feet in size. *Dongria Kondhs* have so far managed to retain their unique cultural and ethnic identity. Embroidery is generally done by unmarried girls; however, it may be done by any lady. The girls make this scarf for themselves and their brothers. This shawl is occasionally presented to her most intimate partner as a gesture of affection. Yarn with three colours is used in embroidery work. They come in three colours: green, yellow, and red. Each colour has its own set of connotations that are represented through socio-cultural values.

Figure 2



Figure 2 (Self Clicked)

Figure 3



Figure 3 (Sketched by the Author)

The weaving of the shawl and the embroidery of the shawl were traditionally done by the tribe itself. However, the tribe is currently just doing "Shawl embroide ry." The government (DKDA Dongaria kondh development agency, office) provides them with raw supplies like as needles, thread, and foundation fabric. At the moment, just one individual, Hiyal Rama (Figure 4) weaves this shawl

which is purchased by the DKDA for Rs.300/and distributed to the tribe for fre e. If at all the tribe wants to purchase the shawl for self-usage, then the shawl is being sold at the price of Rs.250. The weaver purchases the "sutta" (20 bundles) at the price of Rs.1000.

Primary data has been collected in the form of interview with the main artisans who are practicing this craft. The artisans provided brief information about themselves, the weaving process, and the embroidery of basic stitches along with their traditional patterns used in shawls to analyse motifs and its traditional importance towards the tribe. The design intervention is implemented on the existing traditional motifs to create awareness among artisans and explore wide range of motifs for modern society.

Figure 4



Figure 4 (Self Clicked)

Figure 5



Figure 5 (Self Clicked)

Hiyal Rama (Figure 4) has been doing weaving from 20 years. He resides in a village namely Jigidi, in rayagada district. He earlier used to weave sambalpuri saree, from which he learned the techniques of weaving and set up his own workplace. He has also taught 30 dongaria girls and went to exhibitions at places like Delhi and Bhubaneshwar. He is being practicing this since 20 years. In the beginning he uses to supply this shawl to the NGO (Anesha Trible) but now, he supplies it to DKDA office at the price of Rs.300.

Wadakka sindhe (Figure 5) 50 years old women President of the Niyamgiri Dongria Kandha Weavers Association has been doing this craft since she was 12-year-old. She learned this craft from her mother, and it is being passed on to further generation. She has 12-member family in which 2 brother and their wives, 2 *jhiari* (niece) and 6 *puttara* (nephew). She lives in *khajuri* village, and have her own house. To exhibit this craft, she goes for tribal programs, collector programs, trible art and craft mela organized by either government or private sector also.

8. WEAVING OF THE SHAWL

Winding (*Aarotobuleiba*) Figure 6: It is the process of winding the supplementary or weft yarn using Charka. The yarns are dipped in water before winding to make the yarn stiff and avoid breakage during the process.

Figure 6



Figure 6 (Self Clicked)

Warping (*Sutta lambaili*) Figure 7: The warp threads are wound to the fore hand manually up to the calculated number of threads required for warping. Then the warp is being stretched for piecing and sizing processes. Here 2 ends together rare considered to be one end.

Figure 7



Figure 7 (Self Clicked)

Piecing Figure 8: The newly prepared warp is attached to the corresponding yarns of the previous warp; once already being used to weave the shawl, threads of the shawl already woven on the loom remains behind after the shawl has been cut out. The entire length of the warp is 10 metres, which can used for making 4 shawls.

Figure 8



Figure 8 (Self Clicked)

Sizing (Tansun Kaili) Figure 9: The warp that is stretched in the open is sized by using sizing material made out of Maida and water. The stretched warp is lifted up, held together and dipped in the solution and squeezed. Once done it is stretched again and allowed for drying. Since the protruding fibres will entangle with adjacent threads and will cause breakage of threads and resulting defective cloth production. To strengthen the cotton yarn, this process is carried out.

Figure 9



Figure 9 (Self Clicked)

Weaving (Buniba) Figure 10: Pit Loom is a type of loom used for the production of the shawl and its local name is "Tanta". Once all the above processes are done, it is ready for loom set up and thus to weave the fabric. Total number of shafts used for weaving is 2 and the type of weave used is Basket weave. Weft insertion is done with the help of fly shuttle. The weaver held a picking stick that is attached by cords to both the ends of the shed. With a flick of the wrist, one cord was pulled, and the shuttle was propelled through the shed to the other end with considerable force. A flick in the opposite direction and the shuttle was propelled back.

Figure 10



Figure 10 (Self Clicked)

9. EMBROIDERY OF THE SHAWL

After interviewing the craft artisans and recording their observations for their traditional motifs analysis and patterns. These shawls are embroidered by the girls of the primitive tribe of *Dongaria kondh*, inhabitants of the niyamgiri hills of Odisha. *kapda gonda* in their own kuvi language means "Chiefs Cloth". *Dongria Kondhs* have so far preserved their rich heritage of cultural and ethnic identity. The plain textile is first woven on a handloom and then in addition to the border weaving, it is embroidered with green, yellow, red, and brown threads.

The raw material required to do the embroidery are Base fabric and embroidery threads, while their tools are needle and small knife. Their local terminologies are gondha, sutta, chuji and katri respectively.

Embroidery in the shawls begins with the entangling of thread (Figure 11), embroidery on the specific area of the shawl (Figure 12), stretching the fabric after embroidered on the specific area on the shawl (Figure 13).

Figure 11



Figure 11 (Self Clicked)

Figure 12



Figure 12 (Self Clicked)

Figure 13



Figure 13 (Self Clicked)

10. DESIGN DIRECTORY

Women of the *Dongria Kondh* community, a hill tribe in Odisha, embroider their creation myth of *Niyamraja* on thick handwoven cotton shawls in bright vivid colors depicting their *dongars* (hills) and fields which acts as a major source of inspiration for the motifs used in the embroidery. They believe in giving back to nature as much as they take from nature. In Table 1 the detailed motif or design directory is given with its cultural and traditional importance used by *dongaria* tribes in *kapda gonda*.

Dongaria kondh art and craft reflected the importance of the mountains to their community – the triangular shape designs painted on the walls of the village as well as embroidered on the colourful shawls that they wear. Dongaria shawls embroidered by using mainly four colours green, red, yellow, and brown. Each colour carries some cultural values.

Green (*Kiyanulu*) (Figure 14): It symbolizes hills and mountains, green crop fields, trees, plants etc.

Red (Kambitari) (Figure 15): It symbolizes blood, energy, power etc.

Yellow (*Hinganulu*) (Figure 16): It symbolizes peace, togetherness, happiness, etc.

Brown (*Kaadtar*i) (Figure 17): It symbolizes land.

In old days they were using natural dyes for colouring the thread.

Gherumati - Red color, Patra - Green colour, Turmeric - Yellow, Suruma - Brown

Figure 14

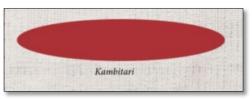


Figure 14

Figure 15



Figure 15

Figure 16



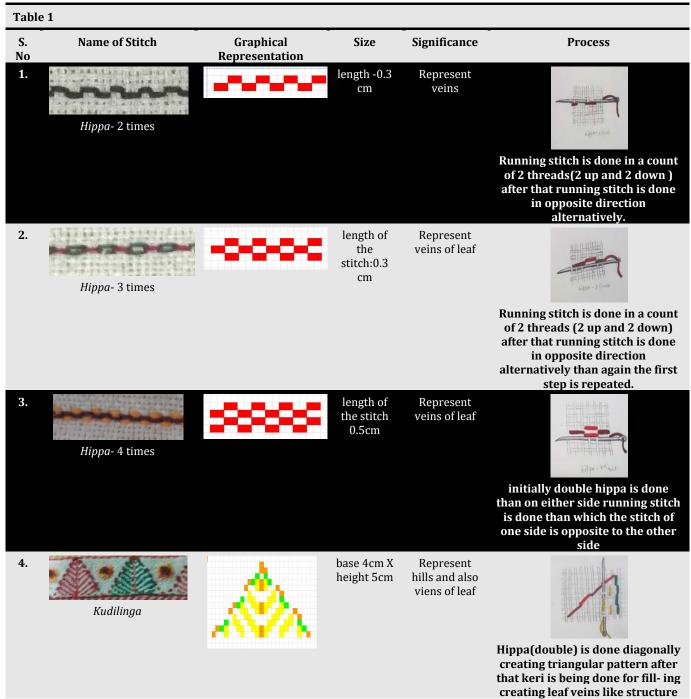
Figure 16

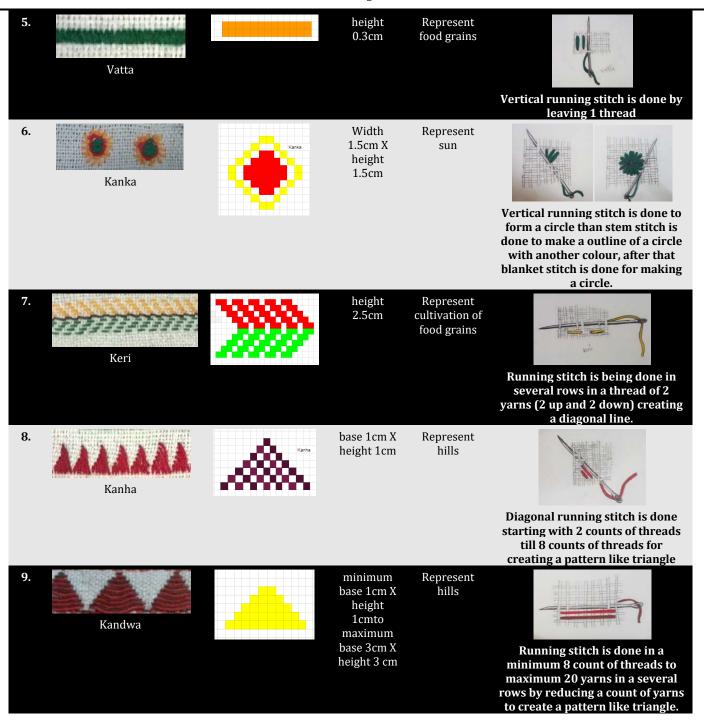
Figure 17



Figure 17

Table 1





11. DESIGN INTERVENTION

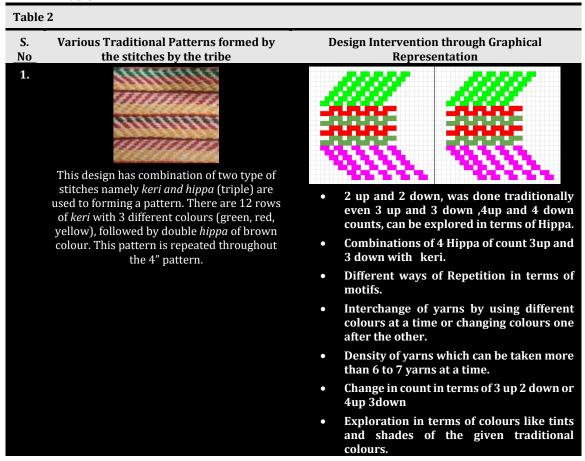
Design intervention played a very important role in every step of the crafting process. This may include the development of new products. Redesign existing products by changing shape, size, colour, and surface manipulation, apply traditional skills to open up and rejuvenate new markets, meet new opportunities, new materials, new processes, new introduction of tools and technology. Design intervention acts as an interface between tradition and modernity. It adjusts the craftsman's production to the needs of the market. It is seen as an interface between traditional and modernity, that matches craft production to the needs of modern living.

According to Kapur and Mittar (2014) design interventions play a very important role in every step of the crafting process. They should focus on a craft's identity, its social and cultural relevance to its region, and the processes and materials involved to include interventions in the right situations with expected efficient outcomes and arguments. Design interventions also help to create a conscience between craftsmen, materials, tools, processes, and a cliental base. Some of the patterns below are made with different stitches. These patterns were taken forward to produce some of the products.

The motif patterns are developed keeping in mind the authenticity of the craft and also referred to the artisan of the tribe, so that the transparency is maintained between the author and the artisan. It was not easy for the author to develop new patterns as the artisans were very much stubborn with their traditional motifs so one has to understand their constraint towards their flexibility, because the motifs they embroidered derived from the hills and nature from which they are surrounded with are considered as their god.

In Table 2 the design intervention in motif patterns has been implemented with respect to the counts of the embroidery, colours, yarn density and in form of repeats and one cannot change the style of the artisan but can implement new interventions in it. So, accordingly the author has developed these patterns as per design directory Table 1.

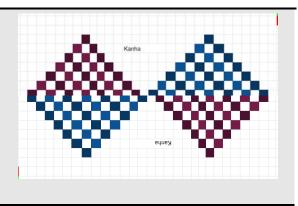
Table 2



2.



This design has combination of two type of stitches namely *keri and hippa* (quadruple) are used to forming a pattern. There are 12 rows of *keri* with 3 different colour (green, red, yellow), followed by double *hippa* of brown colour. this pattern is repeated throughout the 4" pattern.



3.



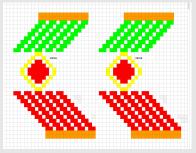
This design is composed of 3 tpye (*kandwa*, *hippa and keri*) of stitches forming a pattern.

- 12 row kandwa
- hippa after that12 rows of keri followed by hippa and again 12 rows of keri in opposite direction
- Again, repeat the second Step.

4.



This design is composed with 2 stitches first is *kanha* with 6 diagonal lines and then 3 rows of *vatta*.



 Combination of keri, vatta and kanka with innovation in the placement of motifs and its repetition.

5.



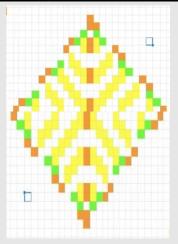
This design is composed of 4 stitches forming a pattern first is *keri* of 8 rows followed by *hippa* and again 8 rows of keri in opposite direction and then *hippa* after that *kanha* and then 3 rows of *vatta*.



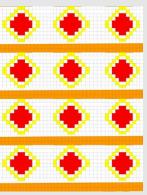
- Addition with respect to kandwa which is also been introduced in between the straight repeats of kandwa.
- Introduction of variation in colors
- Introduction in number of yarns as usually the artisans use 6 to 7 yarns one at a time.

This design consist of various stiches forming a pattern started with 12 rows kandwa and then hinna than 4 rows of kandwa and the hinna t

This design consist of various stiches forming a pattern started with 12 rows kandwa and then hippa than 4 rows of keri than hippa again keri of 4 rows followed by hippa than again 4 rows of keri in opposite direction than kudilinga is done in between kanka is done after that hippa followed by 12 rows of keri than hippa than again 12 rows of keri than hippa than again 12 rows of keri but in opposite direction than again hippa and at last kandwa is done.



Mirror repeat has been bormed by using the kudilinga motif.



Combination of kanka and vatta

Figure 18

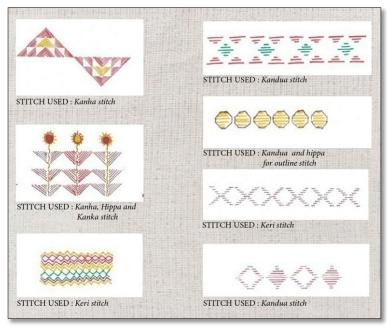


Figure 18 (Sketched by the Author)

Figure 19

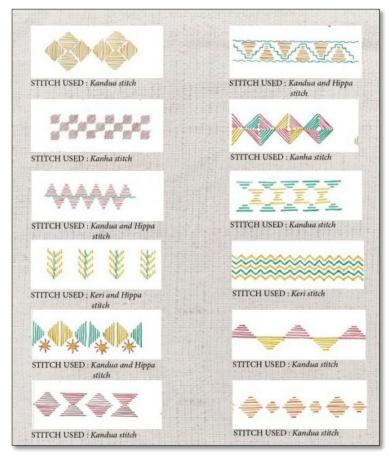


Figure 19 (Sketched by the Author)

In Figure 18 and Figure 19 the author has design intervented more patterns with reference to design directory Table 1 along with the approval of artisans.

12. CONCLUSION

The research process shows the need for a revival of traditional handicraft guilds in India. We live in an era of good design, and we have a lot to thank for the collaboration between designers and craftsmen. The study was conducted to identify the importance of Kapda Gonda shawl in the dongria tribe community. The study reveals the significance of colours and the brief history behind the traditional motifs of Kapda Gonda through interviews of artisans of the tribe helped in analysing Conservation - Cum - Development Plan for Dangaria Kandha Pvtg, Dangaria Kandha Development Agency, Kurli, Chatikona (2016) the weaving and embroidery process involved in the Kapda Gonda, shawl development .This paper work majorly discusses the implementation of the design intervention on the motifs pattern of Kapda Gonda. The new concept of motif intervention provides craft a unique path to move forward as well as the artisans also got an awareness about the new concept of utilizing their craft in different ways. With reference to Table 2, the graphical representation shows the innovative methods in repetition of motifs, introduction of tints, tones and shades of the same colours used. The study further reveals exploration of placements and combination of the given motifs,

implementation of more number of yarns as it also increase the density and strength of the fabric instead of traditionally, two or three times. This study will provide opportunities to generate employment for the artisans as kapda gonda motifs have given a new shape in the field of creativity which will attract young consumers to develop different product range.

CONFLICT OF INTERESTS

None.

ACKNOWLEDGMENTS

Authors acknowledge each and every member of the Dongria Kondha community for their cooperation and special thanks to Dongria Kondha women for giving complete information about Kapda Gonda. Author would also like to thanks Namrata Chaturvedi, Suvashree Senapati, Shruti Singh and Repalle Saramyashree for supporting the collection of data in the field.

REFERENCES

- Behera, B. (2018). Persistence and Reflective of Tribal Narratives on Art and Craft:
 A Curatorial Study on the Particularly Vulnerable Tribes of Odisha.
 International Journal of Science and Research (IJSR), 7(9), 573-577.
- Conservation Cum Development Plan for Dangaria Kandha Pvtg, Dangaria Kandha Development Agency, Kurli, Chatikona (2016). SCs & STs Research and Training Institute (SCSTRTI), Government of Odisha & DKDA, Kurli, Rayagada Micro Project, Ministry of Tribal Affairs (MoTA) Government of India.
- Kapur, H., and Mittar, S. (2014). Design Intervention & Craft Revival. International Journal of Scientific and Research Publication, 1-14.
- Panda, D. S. (2018). A Review on Tribal Ornament with Special Reference to Dongria Kondh. JETIR, 5(11).
- Population Census (2011). Khajuri Population Nabarangapur, Orissa.
- Sanghamitra Sethi, N. P. (2020). Gender Role in Handicraft Promotion : A Case Study Among. Anthropology and Ethnology Open Access Journal, 3(1).
- Shobha, R. S. (2017). Retrieved from JD School of Fashion Design.
- Shobha, R. S. (2017, June 20). JD Institute of Fashion Technology. Retrieved from 01 02. 2022.
- Sinorita Dash, D. B. (n.d.). Indigenous Technical Knowledge of Tribal Art & Craft in Odisha: A. International Research Journal of Management Sociology & Humanities, 4(3), 832-837.
- Sumardianshah Silah, A. S. (2013). Practice Based Research in Craft Education: Approaches to Research Work Book, Procedia Social and Behavioral Sciences, 90, 832-841. https://doi.org/10.1016/j.sbspro.2013.07.158.