



# STATUS OF MATERIAL CULTURE WITH SPECIAL REFERENCE TO AGRICULTURAL EQUIPMENT OF KANWAR TRIBE OF RIGWAR VILLAGE, BILASPUR

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**Abstract:** Exploratory research was carried out to identify the traditional agricultural tools used by the Kanwar tribe of Rigwar village in Bilaspur, Chhattisgarh state. Traditional implements have an important and dominant role in tribal-dominated agricultural activities. Understanding the move from old to modern tools requires documentation and characterization of these tools. To obtain information on widely used implements, a door-to-door survey technique was utilised using randomly selected tribal farmers and a preplanned data collecting schedule. The Kavar tribe is largely found in the central Indian states of Chhattisgarh, Madhya Pradesh, and Odisha. They speak Kawari, an Indo-Aryan language thought to be a Halbi dialect. Military duty is the traditional vocation of the Kavar. Most have left the military to become farmers or wage jobs. Rigwar is a hamlet in the Kota tehsil in the Bilaspur district of Chhattisgarh, India. It is 32 kilometres from the sub-district headquarters in Kota (tehsildar office) Rigwar has a total population of 1,112, with 60.11% of men and 37.43% of females being literate. This village's key concerns are education, drinking water, roads, and electricity. In the village of Rigwar, 1112 people reside in 241 households. Females make up 49.73% of the entire population, while men make up 50.27%. Rigwar has a population density of 79.19 people per square kilometre. There are 845 scheduled tribespeople, 420 of them are females and 425 of whom are males. A total of 388.49 hectares is covered.

**Keywords:** rigwar village, kavar tribe, Agriculture tools, Bilaspur

## Introduction

The Kavar people were formerly soldiers, although they are now mostly active in agriculture. They are classified as "scheduled tribes" by the Indian government. Because scheduled tribes are economically undeveloped, the Indian government has endeavoured to integrate them into political and economic life. The tribes were "scheduled" for preferential treatment and benefits. The Kavar people have it better than most scheduled tribes. In India, the poor are frequently the last to receive assistance, which is given to those with the finest political ties.

Some Kavar have gotten so ingrained in the customs of the surrounding peoples that they are no longer regarded authentic Kavar. They have entirely lost their language and culture, and instead speak Hindi. Members of the Kavar "scheduled tribe" are frequently landowners, which is ironic. Those who own property have a much higher quality of life than those who work on farms. Some of them also work as agricultural labourers or in construction. The Kavar, like many other rural peoples, have elders who serve as community leaders. They mediate disagreements and uphold social order. The Kavar are nearly entirely Hindu. They adhere to Hindu customs while incorporating their traditional beliefs into their Hindu practise.

The Kavar have insufficient medical facilities. Even where medical staff are accessible, drugs, tools, and other necessities for patients are in short supply. Adequate medical equipment and personnel are required, particularly for the control of sexually transmitted illnesses, leprosy, and other contagious diseases. Pray that the Holy Spirit would grant the Kavar teachable and understanding hearts. Pray that a powerful movement of the Holy Spirit will immerse whole Kavar families in God's blessing. Pray that the Holy Spirit may bring Kavar families to seek forgiveness and grasp the sufficiency of Christ's work on the cross. Pray for groups of Christians to pray for the Lord to unlock the hearts of Kavar family leaders to receive God's blessing via a movement of family-based discovery Bible studies.

## Kavar Tribe

The central Indian states of Chattishgarh, Madhya Pradesh, and Odisha are home to the majority of the Kavar tribe. It is thought that Halbi is a dialect of the Indo-Aryan language Kawari, the language of the Kavar. Some Kavar people today speak Hindi and Chhattisgarhi, the languages of their neighbours, and they have started assimilating their customs as well. Some members of the Kavar tribe are no longer regarded as Kavar since they have assimilated so much of the local population's culture. They now speak a new dialect and have fully forgotten both their native tongue and previous culture.

The Kavar are thought as as scheduled tribes. Although they view serving in the military as their traditional vocation, the majority of them have thrown up the military and instead work as farmers or wage labourers. The Kavar have settled and established their own farms on the northern plains, where they are numerous. The majority, however, continue to reside in mountainous areas and rely on other revenue sources including wage labour in agriculture and road construction. As a result, a single crop is grown on the majority of the rich land.

Many Kavar work as agricultural workers for the nearby villages that hold the mortgages on a sizable percentage of their farmland. Farmers in Kavar are being urged to switch to a more dependable kind of farming.

Selling firewood that has been gathered from the forest serves as a significant source of income for them. Additionally, the lower classes produce sleeping cots and weave ropes to sell in the marketplaces. Rice is a primary cuisine among the Kavar. Beef, pig, and other items that Hindus deem filthy are off-limits to them. But they enjoy drinking rice beer and other alcoholic drinks. There are several endogamous groups among the Kavar (only allow marriage within their own groups). These divides are split further into several exogamous sects known as goti. The goti utilise symbols of plants and animals to signify their community because they are "totemistic."

The ancestor or sibling of the group's members is frequently regarded the group's totem, which symbolises their link of oneness. The Kavar goti resemble the high caste Hindus' gotra. Within-goti marriages are not accepted. Negotiations are often started by the boy's father before a marriage.

### **Rigwar Village: The Study village**

Inn at Rigwar Bilaspur District is home to Rigwar Panchayat Kota. Rigwar settlement's location code or village code is 437985, according to data from the 2011 Census. In the Indian state of Chhattisgarh, Kota Tehsil is home to the Rigwar village. It is located 32 kilometres from the Tehsildar office in Kota's subdistrict and 32 kilometres from Bilaspur's district headquarters. According to data from 2009, Rigwar village also has a gramme panchayat.

The settlement has a total size of 1404.3 hectares. 1,112 individuals make up the whole population of Rigwar, of whom 559 are male and 553 are female. Rigwar village has a 48.83% literacy rate, with 60.11% men and 37.43% females being literate. In the settlement of Rigwar, there are around 241 homes. The rigwar village locality's pincode is 494776.

An elected sarpanch who serves as the village's representative in matters of administration is in charge of Rigwar village. According to 2019 statistics, the hamlet of Rigwar is part of the Kota assembly district and the Bilaspur parliamentary district. For all significant commercial operations, the closest town to Rigwar is Ratanpur, which is located around 17 kilometres away.

The residents of this town have fairly tranquil lives. This community has a very proud past. The primary industry in this community is agriculture. This hamlet is still waiting for industrial growth. The key issues in this village are education, clean drinking water, roads, and electricity. These days, the younger generation is more drawn to mobile, laptop, and computer technologies. If banks and other financial organisations offered the locals loans and other forms of help, this community would see true growth. The quality of medical and health services must be raised.

## Social Structure of Rigwar

In accordance with information from 2009, 241 households in the village of Rigwar are home to 1112 people. In the settlement, there are 559 male and 553 female residents. Males make up 50.27% of the population, while females make up 49.73%. There are 1 members of the 1 scheduled castes, of which 0 are male and 1. Males make up 100% of scheduled castes' population, while females make up 0%. 0.09% of the total population are members of the scheduled castes. There are 845 members of the scheduled tribes, including 420 women and 425 men. The population of the scheduled tribes is split 50.3% male and 49.7% female. The population is 75.99% made up of scheduled tribes. In Rigwar, there are 79.19 people per square kilometre.

## Land and Natural Resources in Rigwar

As a professional, fee-based service, Rigwar offers maps, reports, and databases on topography, land use and land cover (LULC), watershed/hydrological characteristics, among other topics. To learn more, kindly get in touch with us. According to information for the year 2009, Rigwar has a total area of 1404.3 Hectares. The total area that has been planted is 329.84 acres. There are around 335.86 acres of unirrigated land. The area that is irrigated is 2.34 hectares. Wells and tube wells irrigate 1.23 hectares approximately. Tanks and lakes irrigate around 1.11 hectares. 8.1 hectares are used for purposes other than agriculture. Permanent pastures and grazing grounds cover around 24.16 hectares. Currently, there are 20.4 hectares of fallow land. The culturable waste land area is 13.34 hectares. In addition to the present fallows, 8.37 acres of land is fallow. About 388.49 ha is covered by barren and un-cultivable land.

## Tools used by farmers

- **Tools for Land Preparation** commonly known as Desi Hal (Iron Made): It is commonly referred to as desi hal and is mostly utilised for basic tillage operations. It weights between 20 and 21 kg. Its handle is made of hollow iron that is linked to the plough's body. The shaft is made of wood and measures 160 centimetres in length. Share measures 30 centimetres in length and is linked to the shoe. The shoe is hollow and comprised of iron sheets that have been welded together. A pair of bullocks provide the power for desi hal. It costs approximately Rs. 1500/-.
- **Desi Hal** (wooden made): Also called as lakdi hal, it is mostly utilised for primary tillage operations. It weights between 17 and 18 kg. It has a wooden handle and measures 55 centimetres in length. Its share is 40 cm long and constructed of hardened steel. The shoe is 80 cm long and made of wood. The beam is 220 cm long and made of high-quality wood. A pair of bullocks power the production of lakdi hal. It costs between Rs. 900 and Rs. 1000.

- **Wooden cum hollow angle Plough:** Also known as hal in the local language, it is built of hollow angle and high-quality wood. It is mostly used to remove the top pan soil (primary tillage). It weights approximately 33 kg. The handle is comprised of a 60-cm-long iron rod. The shaft is 256 cm long and is composed of wood. The shoe is 60 cm in length and is built of a hollow angle. The share is constructed of hardened steel and measures 26 cm in length and 5 cm in breadth. A pair of bullocks provide the driving force for the timber cum hollow angle plough. It costs between Rs. 1000 to Rs. 12000.
- **Pickaxe:** Gainta is the local word for a pickaxe, and it is mostly used for breaking up hardpan soil. It has hardened mild steel edges with sharp tips. It weights approximately 2.5 kg. The handle is 300 cm long, and the pointed working tool is 35 cm long. It has a handle diameter of 33.89 mm and costs between Rs. 250 and 300/-. It is also used for excavating and constructing furrows. Human power is used to operate it.
- **Spade (Kodi):** In this section of the country, a spade is known as a kodi. It weighs around 1.64 kg. It is used on the prepared field to break up clods, dig, and make a furrow. The blade has a working length of 16 cm and is manufactured of mild steel. The handle measures 76 cm long and 3.5 cm in diameter. It is constructed of bamboo. Kodi costs between Rs. 150 and Rs. 160. Human power is used to operate it.
- **Spade (Kodal):** The term 'Kodal' refers to this sort of spade. It is mostly used in agricultural areas to build bunds, ridges, furrows, shallow trenches, and clean water flow canals. Kodal weighs around 1.2 kg in total. It has a working length of 6 cm and a mild steel blade. The bamboo handle measures 83 cm long and has a diameter of 3.1cm. It is commonly employed in all sorts of crops and is operated manually by human power.
- **Hoe (Kodali):** The term 'Kodali' refers to this sort of spade. It is used to create a soil and fertiliser mixture. It is also used to transport soil chunks from one location to another. It weighs about 2.3 kg and has an 8.0 cm working width edge. The material's blade is constructed of mild steel. The handle is composed of high-quality dried bamboo, often known as 'sakhua wood'. The handle measures 80 cm in length and 32 cm in diameter. In the local market, it costs between Rs.220-240.
- **Yoke (Junwat):** It is built of high-quality wood (Palash) and is lightweight. It weights approximately 4.25 kg. The yoke features a projection in the centre to which a rope secures a beam of implements such as a plough, leveller, and harrow, among others. To pull the implement, it is wrapped around the bullock's neck. It is 180 centimetres long and costs between Rs. 700 and 800/-.
- **Planer (Dohra-wooden make):** The planer, or Dohra, is fashioned of high-quality wood and weighs around 20 kg. The plank's length, width, and height are 198, 15, and 5 cm, respectively. It has a 240 cm handle length and is drawn by a pair of bullocks. It aids in field levelling and clod crushing. It is made of wood.

- **Planer (Dohra- metallic make)** : Planer is called as 'dohra' in this section of our country. The body is comprised of welded iron and hollow metallic tubing. The planer is composed of cast iron and is 198 cm long by 15 cm wide. The handle/sandh measures 250 cm long. The leveller weighs 23 kg and costs about Rs. 1500/- in the local market/blacksmith shop. It is mostly used to level tilled agricultural fields. This is also useful for crushing clods.
- **Leveller (Karha)**: Leveller is known as 'karha' in the area. It is used to level the ploughed field in order to decrease water runoff and ensure adequate moisture in the area. It is also useful for clod crushing and is composed of metal (tin and iron) and weighs around 11 kg. The primary source of power for driving 'Karha' is a pair of bullocks. The copper plate is 122 cm in length and 30 cm in breadth. The handle measures 42 cm long and 2 cm in diameter. It costs around Rs. 750/- and is often constructed by a local blacksmith shop.
- **Khurpi (rectangular handle)**: Khurpi is called locally as 'Pasni,' and it has a rectangular handle. It is mostly used on agricultural farms and in kitchen gardens for weeding, planting, and loosening soil near the plant's base. It is constructed by flattening readily available TMT (Thermo Mechanically Treated) bars. It measures 25 cm long and has a working width of 3 cm. It weighs approximately 243 grammes and is priced at Rs. 50/-. It is made locally and sold by the village blacksmith shop or a nearby market.
- **Sickle (Hasua)**: Sickle, also known as 'Hasua,' is mostly used for cutting/harvesting paddy. It is also used to remove small leafy plants and grasses. It weighs 133 grammes and costs approximately Rs. 60/-. The working area/blade length of this sickle is 18 cm. The handle measures 11 cm in length and 2.54 cm in diameter. The handle is composed of high-quality bamboo or wood.
- **Dao**: Dao is a manually operated tool for cutting tree and wood branches. It costs Rs. 250/- and is created locally by a blacksmith shop. It measures 29 cm in length and 19 cm in blade length (cut length).
- **Sabbal/Dib**: Dib, also known as 'sabbal' in the local language, is mostly used for digging holes in the earth crust by cutting the hard pan soil. It is available in two sizes: 70 cm and 140 cm. The smaller dib has only one cutting edge, but the longer dib features cutting edges on both sides, flattened and pointed, respectively. The smaller dib weighed around 1 kg, while the larger dib weighed about 3 kg. Both have a 1.7cm diameter and cost Rs. 70 and 200, respectively.
- **Farsa/Tomahawk**: This is the Indian equivalent of a tomahawk, also known as a 'farsa,' which is mostly used to clear shrubs and standing weeds. It is created and constructed in India by a local blacksmith for around Rs. 400/-. It weights 875 grammes and has a 100 centimetre handle length. It has a 2.6 cm handle diameter and a 25 cm blade length.

- **Bainsala:** Bainsala' is a tool with sharp and heavy metallic blades and a handle. It is mostly used by carpenters to polish the surface of wood. It weighs around 1.22 kg and has a 42 cm long handle with a 2.3 cm diameter. The tool's working width is 5.7 cm, and its overall length is 16 cm.
- **Local Knife/ Chhuri :** 'Chhuri' is another name for a local knife. It is primarily used in the kitchen for cutting and chopping fruits and vegetables on a daily basis. It is created and made by a local blacksmith and costs roughly Rs. 40/-. It weighs 106 grammes, is 29 cm long, and has a 20 cm blade length.
- **Baithi:** Baithi, also known as 'pansul' or 'chilohi,' is mostly used for cutting and chopping in the home. It costs between Rs. 250 and Rs. 270 and weighs 717 grammes. It has a total length of 48 cm and a working blade length of 28 cm.

## Materials and Methods

The study was carried out in the Chhattisgarh district of Bilaspur's Rigwar Village. 150 households in total were chosen at random. Through the timetable and concentrated group talks, information about the native instruments they utilised for agricultural techniques and other socio-personal features was gathered. Along with its measurements, the conventional equipment's working width, manufacturing materials, weight, and other characteristics were given.

### Exhibit. 1

#### Family Member's gender Category

S. No.	Gender	Family Members	
		Number	Percent
1.	Male	88	58.66%
2.	Female	62	41.33%
	<b>Total</b>	<b>150</b>	<b>100%</b>

(Source: Primary Data)

In the above exhibit 1. it can be easily seen 58.66% were male members and 41.33% were female members in the family.

**Exhibit 2****Marital Status**

S. No.	Marital Status	Responses	
		Number	Percent
1.	Married	117	78%
2.	Unmarried	33	22%
	<b>Grand Total</b>	<b>150</b>	<b>100%</b>

(Source: Primary Data)

In the above exhibit 2. It can be seen 117 family members were married and 22% of the family members were unmarried.

**Exhibit 3****Age distribution of family members**

S.No.	Age Group	Male	Female	Total
1.	0 – 10 years	10	9	19
2.	10 – 20 years	7	7	14
3.	20 – 30 years	19	8	27
4.	30 – 40 years	31	30	61
5.	40 – 50 years	10	3	13
6.	50 – 60 years	6	3	9
7.	Above 60 years	5	2	7
	<b>Total</b>	<b>88</b>	<b>62</b>	<b>150</b>

(Source: Primary Data)

It can be easily seen from the above exhibit 3. age distribution among Kanwar tribe of Rigwar village 61 members belongs to the age group of 30 – 40 years of age followed by 27 members belongs to the age group of 20 – 30 years of age. 19 and 14 members were children and adults belong to the age group of 0 -10 years and 10 – 20 years of age.

**Exhibit 4.****Education qualification**

S.No.	Education Qualification	Male	Female	Total
1.	Illiterate	12	11	23
2.	Primary	15	7	22
3.	Secondary	33	2	35
4.	Senior secondary	27	1	28
5.	Graduation	24	0	24
6.	Post-Graduation	17	0	17
7.	Professional/vocational	1	0	1
	<b>Total</b>	<b>129</b>	<b>21</b>	<b>150</b>

(Source: Primary Data)

It can be easily seen from the above exhibit 4. Education qualification among Kanwar tribe of Rigwar village 35 members were secondary qualified followed 28 members were senior secondary class qualified, 24 were graduate, 23 were graduate and 22 were primary class qualified. Male were more qualified than female.

**Exhibit 5****Occupation of family Members**

S. No.	Occupation	Responses	
		Number	Percent
1.	Farmers	77	51.33%
2.	Self employed	3	2%
3.	Government	2	1.33%
4.	Private	1	0.66%
5.	Business	4	2.66%
6.	Dependent	29	19.33%
7.	Agriculture labour	19	12.66%
8.	Wage labour – Mgnrega	15	10%
	<b>Total</b>	<b>150</b>	<b>100%</b>

(Source: Primary Data)

It can be seen from above exhibit 5 occupation of family members 51.33% were farmers followed by 19.33% were dependent on their families. 12.66% were agriculture labourers and 105 were wage labour at mgnrega. 2% were self-employed, 1.33% were working in government sector. 0.66% were working in Private sector, 2.66% were having their own business.

**Exhibit 6****Type of Household**

S. No.	Type of Household	Responses	
		Number	Percent
1.	Kaccha	89	59.33%
2.	Pacca	44	29.33%
3.	Semi-Pacca	17	11.33%
	<b>Total</b>	<b>150</b>	<b>100%</b>

(Source: Primary Data)

It can be seen from the above exhibit 6 types of houses, 59.33% of residents were having kaccha house followed by 29.33% of residents have pacca house and 11.33% were having semi pakka house.

**Exhibit 7****Household Status BPL/APL**

S. No.	Household status	Responses	
		Number	Percent
1.	BPL	134	89.33%
2.	APL	16	10.66%
	<b>Total</b>	<b>150</b>	<b>100%</b>

(Source: Primary Data)

It can be seen from the above exhibit 7 household status Below poverty line and above poverty line of family members, majority 89.33% were BPL and 10.66% were APL.

**Exhibit 8****Sources of water**

S. No.	Sources of water	Responses	
		Number	Percent
1.	Tube-well well within household	-	-
2.	Open well inside household	7	4.66%
3.	Water supply in household	-	-
4.	Public tube well	-	-
5.	Public well	143	95.33%
6.	Public tap	-	-
	<b>Total</b>	<b>150</b>	<b>100%</b>

*(Source: Primary Data)*

It can be easily seen from above exhibit 8 sources of water. 95.33% were using public well and 4.66% were using open well inside their household.

**Exhibit 9****Toilet facility**

S. No.	Toilet facility	Responses	
		Number	Percent
1.	Toilet within household	150	100%
2.	Public toilet	-	-
3.	Open defecation	-	-
	<b>Total</b>	<b>150</b>	<b>100%</b>

*(Source: Primary Data)*

It can be easily seen from above exhibit 9 toilet facility. 100% respondents were having toilets within their households.

**Exhibit 10****Income of Household**

S. No.	Income	Responses	
		Number	Percent
1.	0 – 10, 000	134	89.33%
2.	10, 000 – 20, 000	6	4%
3.	20, 000 – 30, 000	4	2.66%
4.	30, 000 – 40, 000	3	2%
5.	40,000 – 50,000	2	1.33%
6.	Above 50,000	1	0.66%
	<b>Total</b>	<b>150</b>	<b>100%</b>

(Source: Primary Data)

It can be easily seen from the above exhibit 10 annual income of household. 89.33% were earn less than 10,000 followed by 4% of respondents earn in between 10,000-20,000. 2.66% earn between 20,000-30,000 and only 0.665 earn more than 50,000.

**Exhibit 11****Other government facilities by household**

S. No.	Government facilities	Responses	
		Yes	No
1.	MGNREGA card	70	80
2.	Ujjawala Connection	-	-
3.	PDS card	80	70
4.	Any other (Sky Scheme)	-	-
	<b>Total</b>	<b>150</b>	<b>100%</b>

(Source: Primary Data)

It can be easily seen from the above exhibit 11. Mgnrega card holders were 70 members and 80 members PDS card holder.

**Exhibit 12****Tools distribution for Soil in Agriculture**

S. No.	Tools for Soil in Agriculture	Responses			
		Use	Percent	Not use	Percent
1.	Rapa	148	98.66%	2	1.33%
2.	Gainti	145	96.66%	5	3.33%
3.	Kudari	147	98%	3	2%
4.	Nagar	150	100%	-	-

(Source: Primary Data)

It can be seen from the above exhibit 12 tools for distribution of soil in agriculture. 98.66% uses rapa, 96.66% uses gainti, 98% uses Kudari and 100% uses Nagar.

**Exhibit 13****Tools distribution for levelling of land**

S. No.	Tools for levelling of land	Responses			
		Use	Percent	Not use	Percent
1.	Dhatari	148	98.66%	2	1.33%
2.	Kudari	124	82.66%	26	17.33%

(Source: Primary Data)

It can be seen from the above exhibit 13, tools distribution for levelling of land 98.66% uses Dhatari and 82.66% uses Kudari for levelling of land.

**Exhibit 14****Tools for harvesting crops**

S. No.	Tools for harvesting crops	Responses			
		Use	Percent	Not use	Percent
1.	Hasiya	150	100%	-	-

(Source: Primary Data)

It can be seen from the above exhibit 14 tools for harvesting crops hasiya is used by all farmers for agriculture.

**Exhibit 15****Tools used for transporting the crops**

S. No.	harvesting crops	Responses			
		Use	Percent	Not use	Percent
1.	Tractor	16	10.66%	134	89.33%
2.	Bullock cart	130	86.66%	20	13.335
3.	Kawar	90	60%	60	40%

(Source: Primary Data)

It can be easily seen from the exhibit 15 tools used for transportation 10.66% uses tractor, 86.66% uses bullock cart and 60% uses kawar for transportation of crops.

**Exhibit 16****Tools used for threshing in agriculture**

S. No.	Tools used for threshing in agriculture	Responses			
		Use	Percent	Not use	Percent
1.	Tractor	22	14.66%	128	85.33%
2.	Bullock cart	150	100%	-	-

(Source: Primary Data)

It can be easily seen from above exhibit 16 tools used for threshing in agriculture. 14.66% of the respondents uses tractors for transportation of agriculture produce and 100% of respondents uses bullock cart for transportation of agriculture.

**Conclusion**

The majority of tribal farmers cultivate on small, dispersed plots of land and continue to utilise traditional tools and equipment because they are seen to be more affordable and accessible on the local market. Animal power is used heavily in tribal farming. According to the poll, more than 75% of farmers own many bullocks. Modern tools are nonetheless beginning to enter the market, although farmers cannot use massive equipment. The plateau terrain need a lightweight power source and tools that are simple to transport or carry. In this area, a power tiller and its many attachments should be preferred. Additionally, it is necessary to standardise native tools and implements using a combination of traditional and contemporary scientific knowledge.

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