CHAPTER VI

THE CRAFT-POTTERY
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Introduction:

Technology is an important attribute in terms of understanding the culture. Stating the intrinsic value of the study of technology Herskovits opined, "The study of technology is essential to an understanding of culture, just as the comprehension of the material basis of social life is indispensable to understanding human group behaviour. More than this, we have seen that the technological equipment of a people figures more than any other aspect of their culture when judgements of advancement or retardation are drawn. This is due to the fact that technology is the only aspect of culture susceptible of objective evaluation". (Herskovits, 1974: 119).

In fact, technology permits culture to the striking changes in the ways of life of a population. As regards to the culture change, Foster opined, "......, the major force in the culture change is borrowing; members of the group appropriate forms of behaviour they first encounter in alien societies. Consequently, it logically follows that societies that afford their members ample contact with other societies may be expected to change more rapidly and to become more complex than societies whose members have little contact outside their local groupings. The greater the range of novelty to which people are exposed, the greater the likelihood that they will adopt new forms. Contact between societies is the single greatest determinate of culture change." (Foster, 1962:25).

Besides, material culture provides clues to understand and assess the social, cultural, technological and economic attainments in totality. Ceramics,
on the other hand, are also the element of material culture. Chard opined, "Ceramic technology has been called the beginning of science." Further, he said, "The mastery of this craft which is no simple matter, has been called by Childe the beginning of science and perhaps man's first conscious utilization of a chemical change. It provided a fire proof cooking vessel, a convenient container for liquids and waterproof storage and almost everywhere became an indispensable adjunct of human life when introduced. Almost universally, it is also a major medium for aesthetic expression in form, surface treatment and decoration." (Chard, 1962:232).

As a matter of fact, the technique applied for fashioning the pot by some of the contemporary potters is similar to the technique used by the prehistoric potters. The Hiras of Assam is one of such community who still produce pottery by hand without using wheel. Their pottery typology is also a simple one and they can produce a few varieties of vessels. Although some area wise morphological variation are found in their potteries, but they are virtually same with the wheel turned potteries.

Nevertheless, in this chapter the attributes primarily related to the manufacturing of pottery and their morphology are dealt with.

6.1 Technique of making pottery:

(a) Implements used:

It has already been stated that the Hira potters fashion the vessels by hand without the aid of wheel. The implements they used for making the vessels are very simple which are either manufactured by them or available as a natural products or purchased from local markets. These are described below:
(1) **Pestle (Gayan)**: It is one kind of specimen made of wood. The local name of this implement is Gayan: It is used for beating, flattening and pulverising the clay. This is usually made by themselves and sometimes with the help of carpenters. The handle is thinner than the body and has a hand-grip for holding the implements.

(2) **Bamboo sieve (Chalani)**: It is a perforated implement made of bamboo. This is known as Chalani in Assamese. It is used for separating the impurities and foreign materials present in the clay. Finally, the fine particles of clay are achieved by sieving which are the primary raw material for potteries.

This implement is produced usually by the basket workers from the locally available bamboo species and the potters purchased it from the market. However, some potters manufacture the bamboo sieve by themselves. The price of sieve varies from place to place.

(3) **Anvil (Danghonsa/Dansil)**: This is the main tools of Hira potters used for shaping the earthen vessel. This is made of stone but some potters construct the anvil from the clay also. The Hira potters of South Kamrup who basically use stone anvil, collect this either from the river bed or from the foothill regions. Generally, the potters prefer globular polished and riverworn pebbles.

However, the Hiras of South Kamrup use anvils of assorted varieties and they assign different name to them. For manufacturing of a large size vessel they use round convex big pebble as anvil and it is known as Danghonsa or Dansil. A flat stone pebble anvil of medium size is named as Seddiapita. This anvil (Seddiapita) is used for supporting sheet of clay from inside by left hand while beating is done from outside by right hand for enlarging the size of the vessel.
(4) Beater (Pitani): It is a beating implement locally known as Pitani. It is made of wood of good quality. Generally, beaters are made of strong but light wood like Shegun (Tectona grandish), Sal (Shorea robusta) and Bonsum (Phoebe attenuata) etc. Moreover, durability and workability of this implement solely depend on the quality of wood and their maintenance.

The beater may be divided into two parts — the body and the handle. The body which is flat in size and the handle is slightly thin and oval in shape. These are around 30 cm in length and 10 cm (apical end) in breadth. There are different varieties of beaters and they use specific variety for specific purpose. In regards to size and varieties of beaters Saraswati and Behura mentioned, "Beaters of different size, shape and weight have been recorded from different parts of India. Functionally, there are three types of beaters, one is used for enlarging the vessel, another is for smoothening the surface of the vessel, and the third for making impression on the pot." (Saraswati and Behura, 1966: 22). In South Kamrup also all these three varieties of beaters are available. These are used in the same way as referred by the above authors. But the third variety of beater is used for certain particular type of potteries and not for all. Each potter family possesses almost all the varieties of beaters. Most of the potters of South Kamrup made this implements by the help of local carpenter.

(5) Wooden spade (Khana): This implement is locally called Khana. The length of the implement varies from 1.5 meters to 2 meters, its breadth is about 15 cm and thickness is about 2 cm. It is used for digging the muddy clod of clay from below the surface of the earth. This is made of strong wood particularly from Sal, Shegun, Titachopa etc. The local carpenter manufacture this implement for the potters.
(6) **Cutter (Kartan)**: This is a kind of blade made either of iron or bamboo split. The Hira potters of South Kamrup use both iron and bamboo cutters. They locally call this implement as *Kartan*. It is used for cleaning the clay. This iron blades are purchased from the market but the bamboo blades are prepared by themselves.

(7) **Scrapers (Rukani)**: This is a small implement that potter can found easily at hand and free of cost. This is made out of thin bamboo wand. The potters scrape off the unwanted clay from the body of the leatherhard pot by this implement. It is also used for smoothening the vessels.

(8) **Rug cloth (Chirakani / Phatakani)**: A small rug cloth is required for smoothening of the vessels. The potter also use rug cloth particularly for shaping the rim of the vessels.

(9) **Small earthen pot (Panir Saj)**: A small earthen vessel is used for keeping water nearby the potter. This is an essentiality as often times water is extremely necessary for pot making. Sometimes the potters use broken and knobblly vessels for this purpose. Mention may be made that Miller referred to a special variety of pottery made by Maharastra potters for this purpose (Miller : 1985). But this is lacking among the Hiras of South Kamrup.

(10) **Engraving implement (Khajkata)**: As regards to the engraving they use primarily their own thumb nail and also a kind of needle prepared from bamboo or hard thorn.

6.1 (b) **Raw material**:

The manufacturing of pottery is solely based on the raw materials or resources. The most essential resources are the clay, water and fuel for firing. But, the other resources like tempering material, colouring material etc. are considered after that. However, the resources are described below:
Clay:

The surface of the earth is covered with rocks and minerals. The clay is a soft sedimentary rock formed mainly by the weathering of igneous rocks and it is variable in nature and quality. (Jr.W. Enc. No-2 1995)*

The clay is found all over the world in natural condition. It is a combination of alluminium silicate and hydrates. It has a quality of producing any desired shape. However, suitable type of clay which is the most important and salient resource of pottery manufacturing is considered as a 'primary environmental factor' by many scholars. Arnold (1989), Linne (1965), Oliver (1967), Rhodes (1970).

The clay though have similar in structure, but the quality of clay varies in accordance with different factors. The most noteworthy of these are — mineral composition, degree of crystallinity, plasticity, particle size and the amount of soluble salts, exchangeble cations and non-plastics.

However, the most important and essential property of clay for the purpose of pottery manufacture is the plasticity of the clay. Arnold opines that "The plastic properties of clay permit its fabrication into a wide range of shapes and sizes usable for a variety of purposes." (Arnold, 1989: 138). In fact, the property of plasticity permits clay to be mould into many different forms. The clay when mixed up with certain required quantity of water, it makes a paste which is plastic material. And when it baked under fire with a required amount of heat (temperature) it becomes hard and durable.

Although all types of clay apparently appears to be same, but may not at all suitable for pottery production. The potter who is the main artisan of ceramic

industry can identify the requisite and suitable type of clay. It is a fact that they do not have scientific knowledge about the clay quality, but they achieve it traditionally. They apply their own traditional method for selection of clay. The criteria of selection are primarily the texture, composition and adhesiveness of the clay.

The suitable plastic clay/potters clay, for making pottery are not readily and easily available. It is found in certain localities which are only known to the potters themselves. Moreover, these localities are generally far away from the potters villages. However, they have given first preference to the quality of the clay and the question of distance will arise afterwards.

The Hiras use a special kinds of clay for making potteries. The clay used by them is known as *Hiramati*. It is being observed that *Hiramati* is located in low lying and marshy areas. They are aware of the clay fields. They first remove the upper cold of soil with the help of spade and thereafter they go deep into the ground by digging a pit of approximately 2-3 meters deep in search of requisite type of clay. If they encounter water in the pit, it has been bailed out and other organic materials are also removed as far as possible. To identify the right kind of clay, they tested it by taking a small quantity of clay, mixed it with a little water, make a roll with hand and observed it carefully. If the roll of clay does not show any crack than the clay is found to be suitable for pottery making. After digging out the clay, they transported it from the field to their respective houses.

The locality of clay and its distance are displayed in the Table - 9. The distance of the clay field is diverged and varied from block to block and from village to village. The table shows that out of eight development blocks, the seven blocks have not to face difficulties in collecting the *Hiramati* because
the distance of clay fields are not far from their respective villages. Also, the transportation cost is not very high. It ranges from rupees forty to fifty per bullock cart/pull cart. On the other hand, the Tarigaon potters of Chhaygaon block collected Hiramati from Dhantola, a village of Rampur block. The distance of which is 20 km. from their village. In fact, the transportation cost is higher in this than other villages. Again, the potters of Menapara village of Chhayani block and Sontola village of Rampur block have to purchase clay from the others. Here also the clay collection is a costly one.

It is worth noting that Govt. of Assam allotted certain clay fields for the Hira potters of South Kamrup. For instance, the village like Darisatra, Sikarhati, Azara enjoy such facilities. They have reported that government allotted to them about 50-70 bighas of land respectively.

Besides, Hira potters other than South Kamrup, collect another special type of clay known as Sikarmati and used it for the preparation of clay biscuit or Sikar / Khafa for human consumption. In contrary to that, the Hiras of South Kamrup use same type of clay (i.e. Hiramati) for making clay biscuit (sikar).

Tempering material: Though clay is being used as primary resource for pottery making, another resource — the tempering material is essential for fashioning of the vessels.

The Hiramati by nature is sticky and adhesive type of clay which is not easily pliable. Therefore, the Hiras have to use some kind of tempering material to make it pliable. The most commonly use tempering material in South Kamrup is the sand, which is either collected from the river stream bed or purchased.

It is difficult to assess the exact proportion of sand they mixed up with the clay. By and large, they traditionally / conventionally achieved the percentage
of preparing the pliable clay by using the right proportion of sand. But they are unable to explain the proportion. However, they have done it by trial and error method and in fact at a stress they cannot prepare a pliant variety of clay for pottery manufacturing.

This survey indentified four villages, viz—Azara (Hirapara), Azara (Noapara), Lankenwar and Sontola, the potters of which have to purchase the sand for pottery making. The rest of the villages procure the sand free of cost.

**Colouring material**: Among the Hiras the colouring material is known as *Gerumati*. This is primarily used by both the potters of Assam. It is a kind of Haematite (Fe₂O₃) usually reddish-brown in colour. It is found in some specific areas particularly in the hilly regions.

In South Kamrup, the Hira potters of all the villages except Chamaria collect these material by themselves from the nearby hills free of cost (Table-9). The Hiras of Chamaria village, however, procurred *Gerumati* from Dhupdhara of Goalpara district which is 34 k.m. away from the village.

This survey indentified that the potters of Menapara, Ozapara, Azara (Hirapara), Azara (Noa-para), Lankeswar, Jharikuchi and Maloibari do not use *Gerumati* neither they decorate their potteries. They informed that the customers or buyers do not prefer decorated vessels. However, for decoration only a small quantity of *Gerumati* is required.

The potters prepare a solution of *Gerumati* by mixing water as needed and then the solution is applied to the vessels wherever appropriate.

They collect the colouring material once in a year and preserve it for using throughout the year.
Firing material: The firing materials are also very important raw material. The usual firing materials are firewood, paddy stover, thatch, husk, bamboo, cowdung, stubble and ashes. Also, they occasionally use roots of wood and bamboo. Among these firing materials, the firewood, thatch and straw are costly materials. However, sometimes potters procure firewood from the nearby reserve forest and hills. The price of the firewood varied from place to place as shown in Table no - 9.

The potters opine that on earlier occasions the paddy stover/thatch etc. were available free of cost. But now these are also have to be purchase at higher rate. Generally, they collect paddy stover during the winter and preserved it in one corner of their courtyard for using in the entire season.

Paddy husk is also one of the essential firing material. The potter purchases it from the rice mill by paying some amount in cash as there is no fixed price. Sometimes it is seen that potters collect this material in exchange of pot from the villages. Other materials like cowdung, stubble etc. are collected from the field and also from the neighbours.

The study reveals that though the required materials are obtained at free of cost, but they have to face many difficulties in terms of procurements. Sometimes they are to spend a heavy amount of money for transportation of these materials. Generally, they collect raw materials during the winter and in that season particularly, they need a lot of money at a time which often times they could not manage.

6.1.(c) Preparation of clay:

The preparation of clay is in fact, basic to the production of potteries. However, the methods of clay preparation are essentially differ from place to
<table>
<thead>
<tr>
<th>BLOCKS</th>
<th>VILLAGE(s)</th>
<th>CLAY</th>
<th>SAND</th>
<th>COLOURING MATERIAL</th>
<th>FIREWOOD</th>
<th>HUSK</th>
<th>STRAW</th>
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<td>45</td>
<td>100 Truck</td>
<td>2</td>
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</table>

* Trans. — Transportation  
** B.cart — Bullock cart  
- Source: Survey Data

TABLE-9

RAW MATERIALS
place and from region to region depending on nature and quality of the clay. Accordingly, the process of preparation also varies. Saraswati and Behura opined that "........ there are certain standarized processes which are adopted by potters all over the country. These are cleaning, mixing and kneading." (Saraswati and Behura, 1966 : 41). On the otherhand, Ansari reported that in Poona, the potters undergone three different stages of preparation of clay, viz - levigation, treading and kneading. (Ansari, 1964 : 2-3).

However, the clay preparation process of the contemporary potters of Assam is diversified. It is already mentioned that different types of clay are used by the potters of Assam. Hiramati, the principal component of the ceramic production of the Hiras contains the following particles. These are — sand (47.5%), silt (27.0%) and clay (25.0%). On the otherhand, the Kumarmati i.e. the clay used by the Kumars of Assam contains — sand 21.0%, silt—49.5% and clay—29.5% (Medhi, 1992 : 28). Precisely, these are the general preparation of both the clays. But this ratio may vary, though not abruptly, depending on the location as well as the geological constitution of the area concerned.

The process of preparation of clay by the Hiras is described below:

(i) Cleaning : Cleaning is the first stage of the preparation of clay. In order to clean the clay, they first slice the wet clay with a scraper (slicer). Hiras use iron sickle and sometimes bamboo cutter as slicer which they called Kartan locally. With the help of Kartan they slice the clay and remove the smallest and unwanted particles, dirt etc. and spread the clay on the already prepared cleaned courtyard for drying.
(ii) **Pulverisation**: The clay is then pulverised with the help of wooden pestle (*Gayan*). After that they sieve the clay by bamboo sieve or *Chalani*.

(iii) **Mixing**: Pulverisation is followed by mixing. In order to make the clay pliable and lessen the stickiness, the potter mixed non-plastic material i.e. tempering material — the sand. The proportion of mixing tempering material solely depends on the stickiness of the clay. Nevertheless, the Hira potters achieve it behaviourally.

However, to get the right or appropriate clay, they tested it by plying a little mixture of clay in between two fingers and if necessary some more sand or clay may be added. Usually, mixing process is done either on clean courtyard or on a bamboo mat. After that, they conserve these in one corner of their courtyard.

(iv) **Kneading**: Kneading is the fourth and final stage of preparation of clay. In this stage, the potters taken out require quantity of clay either by hand or by bamboo stripe from the already prepared heap of clay. It is then kneaded on bamboo mat or on a wooden plank.

The clay is well kneaded and if necessary they mix some more sand. It is kneaded several times by foot until the softness of the clay is attained. It is a laborious work as they informed and consumed more time and energy. In order to preserve its softness and wetness, the potters covers the prepared clay by wet gunny bags.

The clay is now finally ready for preparation of vessels.
6.1 (d) Fashioning of the vessels :

The preparation of clay is followed by the process of fashioning of the vessels. The Hira produce varieties of pottery in response to the demand of the vendees. For making vessels they primarily use two types of implements — the beater and the anvil, and fashion the vessel by manipulation of the implements by their skill hands and fingers. Since time immemorial, the Hiras manufacturing potteries by hand with beating technique and the fashioning of a complete vessel solely depends on their skillful hands. In fact, this is the significance of the Hira potteries.

Nevertheless, pottery making among the Hiras is predominantly a women's craft. Male never participate in pottery making process. The womenfolk are busy with this craft from the morning till evening in addition to their other household tasks. But their working hours prodigiously increased during the peak season. In this season, the womenfolk fashion pottery throughout the day and even upto the late night. Moreover, their girls are helping their mother. However, the proper working season of the potters starts from January - February.

Hiras fashion the vessel by applying two basic methods :

(i) Coil building

(ii) Pressing

(i) Coil building :

Coil building is the conventionally accepted methods for making vessels. In this method, a lump of clay is rolled between the palms into a long coil which is joined in a circular manner over the clay cake to mould the pot. They continue the process till the completion of the vessels. However, the length and the
The thickness of the coil solely depends on the type and size of the vessel they want to produce.

The coil building technique of the Hira potters may be divided into five different stages. They need 2/3 days to complete a vessel by this method. The entire process of manufacturing is described below:

Stage I: First, a clay ball is prepared by taking a lump of prepared clay between two palms. The quantity of clay depends on the size of the pot which they manufacture. They prepare a clay cake from the clay ball. This clay cake they termed locally as dan. It is a flat round disc prepared by pressing between the palms. The usual size of a dan is about 15 cm diameter. At this stage, they prepare 40/50 dan at a time and allowed to dry these for 24 hours under the shade. Potter do not use any kind of implement of this stage. In South Kamrup, the stage of dan making is known as dankara or danpara.

Stage II: When the dan becomes leatherhard second stage i.e. the enlargement of the dan by placing and beating it over an anvil (Danghonsa) starts. This is followed by fastening of a clay coil. This is prepared by taking a lump of clay between the palms of the hand or on a wooden plank. This clay coil locally known as Nari. This coil is then placed along the edge of the dan by making a small groove with the thumb nail. This is known as Seridia. This way they joined number of coils one after another till they achieved the required shape of the body of the vessel. This process of joining of the coil and enlargement of the vessel is known as Ita. After fixing the clay coil, they allow the pot to dry for about 3-4 hours under the shade.

Stage III: When the vessel becomes leatherhard the third stage begins. In fact, in this stage the action of beater and anvil for enlarging and shaping of the vessel starts. The potters squat on bamboo mat or on a gunny bag, holding
the beater (*Pitani*) in her right hand and an anvil (*Seddia pita*) inside the pot by the lefthand and started beating the vessel. In order to achieve the proper shape of the vessel they beat the vessel from bottom to the top. If necessary they may use extra roll of clay to give the required length of the vessel. At this stage the Hiras fashion the vessel upto the oesophagus portion. In South Kamrup, Hiras named the vessel *Supi* at this stage. The vessel is then allowed to dry again for 2-3 hours.

**Stage IV :** Neck and rim of the vessel is prepared in this stage. The leatherhard vessel of third stage is selected for preparation of the neck and the rim. The edge of a prepared vessel is being moistened by wet finger or cloth. Then a roll of clay is placed over the wet portion of the vessel and the adjoining portion is merged with the fingers. The edge of the pot is narrowed inwardly for shaping the neck. For this a roll of clay coil is joined on the compressed portion and the process continued till it attains the required length and shape of the neck. It is then allowed to dry for sometime. Finally, the shaping of the neck start. They remove the extra clay by bamboo stripe and fashioned the neck with the skill hands and fingers. Lastly, they make smooth the surface by a wet cloth. This process is known locally as *Galdia*. Again, the vessel is allowed to dry in the shade for couple of hours.

After the preparation of the neck the final part of the vessel rim is produced. This is being done again by the fingers and wet piece of cloth. For this, they splayed the edge a little and a small roll of clay is joined on the edge and the rim is fashioned. The shape and any kind of ornamentation on the rim are designed as per the demand and the choice of the consumers. The size, shape and thickness of the rim are varied from vessel to vessel and region to region. This process they called locally as *Mukhadia* or *Kandia*. 
Stage V.: In this stage, the surface of the vessel is smoothed by a piece of cloth soaked in muddy water. This is the most important stage of the vessel because if some crack or porosity appeared on the pot, then the potter has to repair it or discard the vessel.

(ii) Pressing:

This is the most simplest technique of pottery making. No implement is necessary for this technique. This is being referred that in the olden days vessels were made by this technique only. However, this technique is continued till today is many parts of the world. The Hira potters of South Kamrup apply this technique conventionally and produce miniature types of vessels like shallow basin with pinched lip (Chaki), smoking pipe (Chilim), net sinker (Guli) etc.

It is seen that most of the teenagers and even school going children are also interested in pottery making by this technique. This is due to the fact that no proficiency is essential for application of this technique.

6.1(e) Surface treatment:

In terms of surface treatment, Hira potters have not paid much attention to it. Suffice it to say that decoration, painting etc. are almost absent in their potteries. They informed that painting, decoration are normally used to seal the porosity of the vessels and as they prepare the vessels of good quality with well prepared clay and vigorous beating, thereby the occurrence of porosity and other abnormalities on the vessel do not arises. Therefore, they are not interested for embellishment by applying any kind of painting on the vessel.

However, some potters occasionally decorate their potteries. Their technique of decoration is very simple. They call it as Rangkara or Rong bolowa. For this, they use a reddish-brown haematite found in certain localities of the
area concerned. They call it Gerumati or Rangamati. They prepared a paste of reddish-brown colour. The preparation of the paint/stain has already been discussed along with the raw material. Usually, they apply paint/stain on the upper part of the belly, neck and rim portion of the vessels.

They do not use any kind of paint/stain brush for decorative/painting purposes. In South Kamrup, they use a piece of cloth as paint brush for painting their vessel. Sometimes they use their finger tip for the said purpose. They dip their four fingers in already prepared haematite solution and draw curve lines on the body and neck portion of the pot, when the vessel is in leatherhard state.

**Engraving:**

In some kind of vessels the engraving is applied when the vessel is in leatherhard condition. For the purpose, they generally use small bamboo pointed needle and engraved with various design such as geometric design, oblique lines, dotted lines etc.

**Drying:** The duration of drying of the pot varies and depend on meterological condition. During dry season (Dec-March) two or three days of drying of the vessels is sufficient. They usually use shade for drying the pot. However, in winter they are exposing the vessels to the sunlight as they are getting a subdued sunlight during this season.

**6.1 (f) Firing:**

Firing is the final stage of pottery production. In fact, after the completion of firing a pot is ready for use as well as for marketing.

It is a critical juncture for the potters because firing proofs the dexterity of the potters and perfectness in terms of making potteries. In fact, perfectness related to right proportion of tempering material, preparation of clay, thickness
of the pot, beating etc. If these are not flawlessly made then the pot might developed crack or totally damaged at the time of firing.

Hira potters have no specific fire place for firing the vessels. They burn the vessels on an open ground particularly in one corner of their courtyard within their household arena. Some potters have constructed shed for firing in inclement weather.

Regarding procurement and utility of the raw materials for firing have already been discussed earlier under the caption 'Raw materials' However, it is pertinent to mentioned that quite often the potters have to face a lot of problems in procuring the raw material for firing. As a matter of fact, sometimes they are to sell unbaked potteries. For instance, two youths of Hirapara village of Azara area are purchasing unbaked potteries and after baking they make the business.

However, the process of firing is known as Thupadia in South Kamrup.

**Arrangement of the vessel for firing**:

Arrangement of potteries for firing is one of the salient aspect. If the arrangement is not properly made then vessels will never be baked perfectly. For this also experience plays a very vital role.

Arrangement of vessel for firing depends on the quantity of pottery has to be burnt. It varies from potters to potters and season to season. Sometimes, they burn a small number of vessel for their convenience. But generally skillful potters prefer to burn large number of vessel ranging from 200/300 at a time. In fact, the arrangement of vessel could be divided into two categories which are described below:
(i) Firing arrangement for smaller vessel:

In this category of firing, they burn 40 to 60 vessels at a time. They prepare a circular bed of dry paddy stover/stubble on their courtyard. Over this, some firewood and bamboo splits are systematically arranged so that vessel could be placed cosily over it. The space between two pots are filled up with small piece of firewood, dry cowdung, husk or thatch. One of the essential factor as regard to the arrangement of the vessels is the shape of the heap. They arrange the vessels in such an order so that the shape of the heap will be a conical one. This is being done by decreasing the number of vessels towards the top.

Finally, they cover the entire heap by paddy stover and over this sprinkle some husk and ash and set the heap on fire. Generally, they burn the vessel in the afternoon or in the evening and continue it to 4-5 hours or even sometimes it goes throughout the whole night. When the firing is completed than it is allowed to cool down totally. In the next morning, they taken out all the pots from the fire place. After that, they classify the pottery as fully baked, partially baked, crack or damage. In fact, they keep separately the partially baked potteries which are to be baked once again.

(ii) Firing arrangement for large number of vessel:

In this process, the Hiras arrange a large circular bed of dry paddy straw/stover and place other firing materials as mentioned earlier. At this, they burn different types of vessel which is ranging from 200 to 300 at a time. For this, it need a considerable area of space. Therefore, sometimes they have done it elsewhere and not in the courtyard.

However, pots are systematically arrange/placed as one after another in a row. First, large type of vessels like Kalah, Hari, Kata etc. are placed on the
ground by keeping their mouth inwardly towards the centre. Over this, medium size vessels like Tekeli, Ghai etc. are laid circularly with their mouth facing towards the centre. The disc type vessel like Pat charu are placed vertically in between the large vessels. Small type vessels like Kerosene telar chaki, Bhuruka etc. are arranged above the big vessels. The gap between the vessels are filled up with cowdung, husk, dry stalk of tree piece of wood etc. This sequence of arrangement of the pots gives a dome shaped view. Then the entire heap is covered with broken pots and potsherds along with stover or thatch. Finally, husk or ashes are sprinkled over the heap. In fact, the reason of covering these broken potsherds, ash and wet straw etc. is to control the fire and exert sufficient heat and also preserve heat for longer period, as they informed.

Generally, potter used to bake the vessel in the clear sunny days in the afternoon. It takes 7/8 hours for baking a large size heap. During the course of firing especially after three hours potters taken out ashes gathered in between two pots by a piece of bamboo split. This is, in fact, gives a new impetus to the fire as the unburnt straw and other materials are started burning afresh. This process is called Sarkata or Bindhadia in South Kamrup.

It is worthnoting that the arrangement of vessels for firing of second category have to face some difficulties. Although firing is done in open air, but it is not devoid of any danger. Sometimes the sudden uprising of fire may create an accident in their residential area.

Above this, it needs a enormous man power particularly of male sex which are found usually in a joint family system. But, most of the potter families now-a-days have a nuclear family structure. Thereby, it restricted the baking of huge quality of potteries at a time particularly among the Hiras. Although firing of vessel is a males duty but both the sexes are involves in the process of firing or Thupadia.
6.2 Morphology of the pottery:

Hira potteries are one of the important and essential socio-cultural elements of the people of Assam. They produce different types of potteries with various shapes and sizes used for varied purposes. Moreover, now-a-days they manufacture some specific types which could be considered as innovative types of potteries. For instance, wok (*Kerahi*), spouted vessel with handle (*Kamandalu*) etc.

However, the potteries produce by the Hiras could be categorised into two: (i) conventional types (ii) special types. These are described below:

(i) Conventional types:

Type -1: Pitcher (*Kalah*): It is a long, large and cylindrical neck vessel with rounded base. The rim is also round but slightly flared. Shoulder is convex. The rim, neck and the shoulder portion are painted or stained with reddish brown colour (*Gerumati*). It is used for storing and fetching water. Some people use it also for filtering water. Sometimes it is used for preserving molasses produce locally from sugarcane. In fact, sizes and shapes of the pitcher varies according to the utility and also on regional basis. (Fig. no. 10.(a))

Type -2: Miniature vessel (*Tekeli/Bhetua*): This vessel is same with pitcher but smaller in size and shape. The neck and rim are sometimes painted / stained with *Gerumati*. The same type of vessel is also prepared by Kumar and they called it *Ghat* or *Tekeli*. This is entirely used for ritual purposes. But the *Tekeli* or *Bhetua* produced by the Hiras used as a container for preservation of liquid food items like milk, molasses etc. It is said that molasses preserved in the *tekeli* is very delicious (Fig no.10.(b)).
**Type- 3 Frying pan (Pat charu/khula charu)**: It is a disc type vessel with flat base, thick, turn up and inverted rim. Body is extensively sloping towards the base almost at an angle of 40°. This is locally known as *Pat charu* but the potters of Jharikuchi village of Dimoria block called it as *Khula charu*.

However, a morphological variation of this vessel is observed in Dimoria and Chamaria blocks. The base of the vessel is deep high and bears a convex profile. The rim is highly inturned and sometimes beaded. It is used for cooking and frying purposes such as preparation of rice cake, puff rice, flat rice etc. (Fig. no. 10.(c)).

**Type- 4 : Wide mouthed vessel (Small size) : (Doi basan)**: It is a small but wide mouthed vessel. Neck is almost absent and thus the rim is made directly on the body. Normally, it is used for preparation of curd (Fig. no. 11.(a)).

**Type- 5 : Wide mouthed vessel (Medium Size) (Ghai/Lurka)**: It is also a wide mouthed vessel with round base. Neck is short and mouth is slightly out turned with a plain rim. It shows a concavo-convex profile. It is used for preparation of curd especially by the Assamese people (Fig. no.11(b)).

**Type- 6 : Wide mouthed vessel (large size) : (Kata)**: This type has also a wide mouth as the previous one excepting the size which is bigger proportionately than the earlier. In this, the body as a whole is larger than the neck. The shoulder is convex and the base is round.

A slight variation of this type is found in Dhupguri village of Rani block. In this village, neck is slightly larger and thicker than the body. This is basically used for preparation of curd and also used as a container for keeping food grains (Fig. no. 12.(a)).
Type-7: Short neck vessel (HarilDabar): It is a large size vessel with short neck. Body is round and large. Mouth portion is cylindrical in shape and wide. Shoulder is convex. The significant feature of this vessel is that it has a lid made of clay. It is used to avert the insect, mouse and rat etc. It is used for storing food grain, water and brewing rice beer. Some potters also use it for keeping their clothes, ornaments and other valuables. The tribal folk widely purchase it for preparation of country liquor (Fig. no.12.(b)).

(ii) Special types

Type-8 Wide mouthed bowl (Khuli Bairai Japi): This vessel is similar to type-7 except the mouth which is slightly wider. It is used for cooking rice and also for making the puff rice and flat rice. However, there are regional variation which besides other also denotes the utility (Fig. no. 13.(a)).

Type-9 Smoking pipe (Chilim): The smoking pipe or Chilim is another type that Hira potters produce by pressing method. It has an elongated funnel shape mouth with long and cylindrical base and a central hole from base of the mouth to the bottom. Sometimes engraving is done with criss-cross design on the outer surface of the body. It is used for smoking tobacco. It has also a small variety which is used for smoking hemp. In fact, this type of smoking pipe is known as Bhangar Chilim in Assamese (Fig. no. 12. (c)).

Type-10 Vessel with sieve (Jap charu): It is a long cylindrical neck vessel with rounded base. Rim is round and beaded. It has a fixed sieve inside the neck. The sieve is separately made on a dan and finally fixed at the neck before firing. It is primarily used for preparing steamed rice cake (Fig. no. 13.(c)).
Type-11 Musical drum (*Nagara*) : It is like a kettledrum but large, concave and conical in shape. It has a round wide open mouth. The mouth is covered with animal's skin which is tightly fixed with the cords of same skin. It is a special kind of pottery made by specially skilled potters. Therefore, a very few of potters found to have the capability of making *Nagara*. Though the vessel is large one still it is made by the women. It is found to be used in ritualistic purposes among the Hindus (PL. No. III (c)).

Type-12 Musical small drum (*Kurkuri*) :

The shape of this is same with the *Nagara* but small in size. In fact, it is a part of accessory of *Nagara* which are collectively used for ritual function like *Nagara Nam*, *Thia Nam* and also sometimes for Drama, Bhaoña etc. among the Hindus in all over the Assam.

Both *Nagara* and *Kurkuri* are the popular musical instrument of rural and urban areas. Both are the special ceramic types manufactured primarily by the potters of Dhantola village of Rampur block in the entire South Kamrup region. They are specialist in this craft and manufacture these drums on order basis. It is reported that they also sold these products outside the district and often times people from distant areas came to them for these musical drums. This indicates the demand and popularity of their product (PL. No.III (c)).

Type-13: Musical Instrument (*Daina*) : It is another type of musical instrument produced by the Hiras and is known as *Daina*. Its mouth is open and wide. It is concavo-convex in shape with round base. Mouth is covered with animal's skin which is fixed tightly with cords made of skin. This is also special variety of musical instrument used for all kinds of music as an instrumental accessory. The Dhantola Hiras of Rampur block manufactured this type on order basis (PL. No.III (c)).
Type-14: Shallow bowl (Maloi): It is a small shallow basin. It has wide mouth and round base, showing slightly convex profile. Rim is slightly flaring up. It is widely used in social function and ceremonies of rural areas. In fact, same type of pottery is also manufactured by Kumar potter for offering prasad to the almighty (Fig. no. 14.(a)).

Type-15: Flower vase (Phular tab): It is trapezoidal in shape with a wide mouth. The base is comparatively tapering and small in size than the mouth. Rim flares up slightly with a broad beaded design. Basically, it is used for plantation of flower plant. It is rarely manufactured by the Hira potters (Fig no. 14.(b)).

Type-16: SAVING POT/MONEY BANK (Lakhi Bhandar): The shape of the vessel is variable. However, in majority cases it is globular in structure. Mouth is slightly bigger and round in shape with a hole at the middle for inserting coin through it. It is used as money bank.

Type-17 Lime pot (Bhuruka): It is a small size vessel similar to that of Lota. This is specially made for preservation of lime used by the rural folk for betel nut. Therefore, only a few potters of specific locations manufacture this (Fig no. 13(b)).

Type-18 Wok (Kerahi): This type of vessel is similar to that of Pat charu. But it is slightly deeper and bears two handles on either opposite sides at the rim. This special type of vessel is prepared by the Hiras of Chamaria and Menapara village of Chayani blocks. In fact, it is a replica of cast iron cooking pan or wok. It is also used for cooking or preparing rice cake (Fig. no. 15.(a)).

Type-19 Toy (Putala): This is a special type of item and they make it in festive occasion like Rass, Bhotheli/Suari etc. festivals. They manufacture
assorted toys basically human and animal figures. They never used mould for this and prepared by pressing technique only.

**Type-20 : Kerosene oil lump (Kerosene Chaki):** It is a miniature type of earthen lamp of globular in shape. It contains two separate parts—top and base. Top one is a elongated barrel with a small flaring groove at the middle. A hole is produced throughout the barrel. This hole is for inserting threadwick. The base portion contains the main vessel. It has a small opening mouth to give support to the top wick barrel with a cylindrical neck. The body of the pot is flat but round and bears a handle at one side. It is used as Kerosene lamp by the people of rural areas (Fig. no. 15.(b)).

**Type-21 : Clay biscuit (Sikar/Khala):** It is a clay biscuit locally known as Sikar/Khala prepared by pressing technique. It is circular in shape used for human consumption. It is favourite for the pregnant women but also often times eaten by other women in the rural areas of Assam. It is reported that they used it a anta-cid in gastric problems also. Besides, a special kind of clay without any impurities and sand particles is essential for this (Fig. no. 16(c)).

**Type-22 : Basin like disc (Thali/Dama/Nadia):**

It is disc like shallow vessel globular in shape with wide mouth. It is used for storage purposes. Sometimes it is also used as manger (Fig no. 15.(c)).

**Type-23 : Long neck vessel (Jonga):** It is cylindrical, long neck vessel. Shoulder is convex and beaded. Rim and base is round. It is used for brewing rice-beer by neighbouring tribal peoples (PL. No. III (b)).

**Type-24 : Wide mouthed bowl (Bhatar Charu):** It is a wide mouthed bowl with a large structure. It is almost similar with Kata. But slightly larger than it. It is used for cooking rice by the poor people of rural areas. It is widely purchased by the immigrant muslims of char areas.
Type-25 : **Net sinker (Guli)**: It is a very small pottery item manufactured by the Hiras. It is an elongated shape with varied size. They generally prepare two to three varieties of net sinkers. The manufacturing process of net sinker is very simple one and even unskilled person after getting a practical lesson can prepare it. For this, it requires a small quantity of prepared clay and thin stalk of bamboo or piece of reed. First, small quantity of clay is taken out and it is flattened by placing it in between two palms of the hands. After that, clay slab is rolled around a thin stalk of bamboo or reed and dried it along with the reed or bamboo stalk. When it is fully dried, it baked along with other potteries. It is used as weight for the fishing net (Fig. no. 12(d)).

Type-26 Basin on stand (**Dhunadani**): It is a basin type vessel with stand known as *Dhunadani*. It has three parts — basin, stand and a handle. Mouth is small and rim is slightly inverted. There are a few obliquely made rectangular holes around the wall of the basin. Each part i.e. basin, stand and the handle are made separately and when these become leatherhard, join together to form the vessel. It is used for burning incense (*Dhuna*) usually for ritual purposes and also as masquitto repellent (Fig. no. 16.(a)).

Type-27 : **Incense stand (Dhupdani)**: It is an elongated clay stand. The upper body is a light solid mass and conical in shape. It has 6-7 needle holes in its body. It is used for burning incense sticks for ritual purposes (Fig. no. 16.(b)).

Type-28 : **Shallow basin with pinched lip (Chaki)**:

It has shallow base and pinched lip. It is made by pressing technique. Rim is slightly concave. It is used for ritualistic purpose. It is mostly prepared by the children and youngster (Fig. no. 16.(c)).
The Hira potters of South Kamrup produced altogether twenty eight varieties of pottery as has already been described. These assorted types of vessels are varied in size and shape as per the needs of the people with the regional characteristics.

6.2 (b) Distribution and Analysis:

The Hira potters of South Kamrup are scattered in eight development blocks. Although pot making is their primary occupation, but at present, it is observed that due to some constrains their patterns of occupations have undergone an appreciable change which will be discussed separately in the following chapter.

However, the villages under the study area manufacture various types of potteries. Some of them make it seasonally and others throught out the year. It is worthnoting that most of the Hira potteries are utilitarian in character and used for day to day activities in every household for cooking, storing and eating purposes. Besides, they also produce some religious types of potteries like Dhupdani, Dhunadani, Chaki etc.

In fact, production of vessels is primarily related to the demand of the consumers. Therefore, some particular types of potteries are copiously made and few others are occasionnally produced. The details of the distribution of potteries and their analysis are discussed below.

For morphological analysis the potteries could be divided into two categories: (i) conventional types (ii) special types. The reason of these divisions is based on the production of potteries. In fact, those potteries which are not produced as a common type by all the potters are categories into special types. The conventional types are by far, produced commonly by all the potters.
In the conventional category only seven types of potteries are found. Altogether twenty one varities are classified as special types. The production of these potteries is sporadic and based on demand. Moreover, their production is regionally biased and hence some types are never produced by the potters of some blocks. But, others are producing those types of vessels profusely.

This is pertinent to mention in regards to the percentage of annual production of pottery shown against the blocks in Table no -10 are very much related to the number of potters present in the blocks. The blocks like Boko, Chamaria and Chhaygaon comprises only one village. Hence, the percentage of potters in those blocks is significantly low.

It is already mentioned that some types of potteries are commonly produce by all the potters of South Kamrup. These are Kalah, Tekeli/Bhetua, Pat charu/Khula charu, Doibasan, Ghai/Lurka, Kata/Kata charu and Hari/Dabar.

Among these common type Kalah acquired the highest percentage (17.85) of production in Dimoria block. The lowest percentage is 7.32 produced by the Boko block. However, in other blocks, the variation of production of Kalah is marginal. The second highest percentage 14.01 is attained by Chhaygaon block.

Similarly, Tekeli/Bhetua is also common to all the Hira potters. The highest percentage (18.36) has been found again in the Dimoria block. The lowest percentage (7.25) is found in Chandrapur block. The variation of production in other blocks is almost marginal.

The Pat charu/Khula charu — another common type of pottery is found highest (27.27%) in Chamaria block. The lowest (7.14%) producer is the potters of Dimoria block. Small size wide mouthed vessel (Doi basan) is another common type of pottery. It is seen that this type of vessel becomes popular in
terms of production among the Hiras of certain blocks. The percentage of production of *Doi basan* rank highest (20.33) among all the potteries. However, in Chamaria and Dimoria its percentage of production is comparatively less. Again, among the high producing blocks Chandrapur block is the highest with a percentage 36.23 supported by the potters of Rani block which attains the second highest (24.64) percentage. The potters of these two blocks supplied this vessel to the consumers, particularly of the restaurant owners of Guwahati. They are getting a good profit, in return, and so they engaged themselves primarily in the production of this type.

Again *Ghai* or *Lurka* production is common in the entire region. Rani block has produced the highest quantity (19.68%). The lowest producing block is Boko and its percentage is 14.19. Likewise, *Kata* is another vessel used for making curd. The highest quantity of *Kata* producing block is Rani (15.84%) and the lowest (1.44%) is the Chandrapur block.

*Hari/Dabar* is one of the largest vessel produced by the Hiras. Besides, it is the last among the most common vessels produced by the Hiras. The highest producing potters are of Boko block (7.86%). The potters of Chamaria produced the lowest with a percentage of 1.82.

**(ii) Special Types :**

*Khuli baira* (wide mouthed big bowl) is primarily produced by three blocks i.e. Boko (2.62%) Chamaria (2.73%) and Rampur (0.50%). The potters of other blocks are not interested to fashion this vessel due to lack of demand. However, the percentage shown above against the blocks reveal that Chamaria block is the highest producer and the potters of Rampur block fashion only 0.50%.
Chilim (smoking pipe) is another type of pottery of this category. This is produced with a limited quantity by the potters of all the blocks except Chhaygaon and Chandrapur. The highest producer among them is the Chayani block with a percentage of 2.94. The lowest producer is Rampur block with a percentage of 0.25. The variation in production among the potters of other blocks is insignificant.

The Jap Charu — this vessel is produced by the potters of seven blocks except Boko. This is a special kind of pottery fashion particularly during the festive occasion like Bihu. Perhaps this may be the reason of their minimal production. However, potters of Chhaygaon produce highest percentage (8.40) whereas potters of Chandrapur are the lowest producer (2.20%). Other three blocks i.e. Chayani (4.40%), Rampur (4.18%) and Dimoria (4.99%) manufactured this type below 5%.

The most special varieties of vessels so far found are the musical drums which includes Nagara, Kurkuri and Daina. These three specimens are primarily related to musical practices. Among these Nagara is the biggest variety which is produced by the potters of different blocks. In South Kamrup, Rampur is the only block which produces all these musical drums. Potters of Rani and Dimoria blocks construct both Nagara and Kurkuri but not the Daina. All these musical drums are produced by the same clay— the Hiramati. In Rampur block only the Dhantola Hiras are the producer of these musical drums. Besides, they are the only potters who sold the finished products. It is reported that they are getting customers outside the district and often times people from distant places came to them for finished musical drums. The potters of other blocks fashion only the clay drums in which the animal skin and the cords have to be fixed by the customer themselves or they are to engage the technician drum maker/cobbler for this. Those women potters make these drums along with their other potteries.
Maloi (small wide mouthed bowl) is another type prepared by the Hiras. This ceramic product is fashioned by seven blocks with varied percentages. The highest manufacturing block is Chamaria (7.28%) and Chandrapur block occupy second highest position (7.25%). The lowest is Rampur with a percentage of 0.50. The production of other blocks marginally varies.

Phular tab (Flower vase) is another rarely produced earthen vessel. Among eight development blocks only the Sikarhati potters of Rani block fashion this vessel. Their percentage is 0.32.

Both Money bank and Lime pot are produced only in Rampur block and their percentages are 2.46 and 1.23 respectively. Same is the case with Toy, the production of which is very limited with a percentage of 0.91 and that too found only in Chamaria block. They also produce another significant variety the spouted vessel with handle (Kamandalu) is used for Assamese dance drama (Bhaona) and other theatrical performance.

Another specific type Wok (Kerahi) made of clay is found only in two blocks of entire South Kamrup. This may be considered as one of the innovative type of pottery of the Hira potters. The percentage of production is highest in Chamaria block (5.46) and potters of Chayani block produce only 1.11%. Similarly, Kerosene chaki is also varied in terms of production. This is produced only in four blocks. The highest producing block is Chayani (5.15%) and lowest (0.50%) is found in Rampur block. Sikar / Khala (clay biscuit) is another rare variety. It is produced highest (5.89%) in Rampur block and the lowest (1.92%) in Rani block.

The basin shaped disc (Nadia) is found in four different blocks but these are scantily produced. The highest percentage of production, therefore, is only 0.65 found in Rani block and Chamaria block is the lowest producer (0.32%).
The process of manufacture and its utility although same but it is known by different names in different areas. The people of Dimoria block identify it as a *Nadia* whereas the people of Boko and Chamaria block named it as *Dama*. Besides, the potters of other blocks named it as *Thali*.

Long neck vessel (*Jonga*) is another specific type manufactured only in three blocks i.e. Chayani, Rani and Chandrapur. The term *Jonga* has been derived from Bodo. Rice beer is known as *Jonga* among the Rabhas and Bodos of Bodo linguistic group. That is why perhaps the pot used for preparation of this kind of beverage is known as *Jonga*. This type of pottery is widely purchased by tribal folk for preparing country liquor or rice-beer. However, the highest percentage of *Jonga* (0.8) is found in Rani block. The lowest percentage (0.71) is found in Chandrapur block.

Again, another wide mouthed vessel for cooking rice (*Bhatar charu*) is made by the potters of Jharikuchi village of Dimoria block. Although morphologically it is similar with the *Kata* but a bit larger in size. However, the percentage of production is 1.54 only.

Over and above, Hiras also produce *Chaki, Dhupdani* and *Dhunadani*. These are fashioned occasionally and infrequently is certain blocks. *Chaki* (shallow basin with pinched lip) is produced only in five blocks of the study area. Among this, Chhaygaon is the highest producing block with a percentage of 6.55 and lowest producer is the Rani block with 0.49 percent. The *Dhupdani* and *Dhunadani* are also occasionally produced ceramic items which is found in different blocks of the study area. However, the highest productions of *Dhupdani* (5.34%) and *Dhunadani* (5.24%) are found in Boko block. These potteries are produced for ritualistic purposes. Some potters informed that while manufacturing these potteries, kind of sanctity has to be maintained.
### TABLE - 10
PERCENTAGE OF ANNUAL PRODUCTION OF POTTERY (BLOCKWISE)

<table>
<thead>
<tr>
<th>Sl. no.</th>
<th>Types of Pottery</th>
<th>Local Term</th>
<th>Beke (%)</th>
<th>Chamaria (%)</th>
<th>Chayani (%)</th>
<th>Chhayagon (%)</th>
<th>Dimora (%)</th>
<th>Rampur (%)</th>
<th>Resi (%)</th>
<th>Chandrapur (%)</th>
<th>Total</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pitcher</td>
<td>Kalah</td>
<td>7.32</td>
<td>9.08</td>
<td>12.48</td>
<td>14.01</td>
<td>17.85</td>
<td>12.78</td>
<td>7.26</td>
<td>8.69</td>
<td>11378</td>
<td>10.27</td>
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<tr>
<td>2</td>
<td>Minature type of vessel</td>
<td>Tekel/Itena</td>
<td>14.66</td>
<td>10.90</td>
<td>11.38</td>
<td>16.82</td>
<td>18.36</td>
<td>12.53</td>
<td>9.12</td>
<td>7.25</td>
<td>12389</td>
<td>11.18</td>
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<td>3</td>
<td>Frying pan</td>
<td>Par chau</td>
<td>19.37</td>
<td>27.27</td>
<td>14.69</td>
<td>16.82</td>
<td>7.14</td>
<td>10.56</td>
<td>8.15</td>
<td>14.49</td>
<td>14508</td>
<td>13.09</td>
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<tr>
<td>4</td>
<td>Wide mouthed vessel (small size)</td>
<td>Don bana</td>
<td>21.58</td>
<td>5.46</td>
<td>16.53</td>
<td>17.75</td>
<td>8.68</td>
<td>18.67</td>
<td>24.64</td>
<td>36.23</td>
<td>22525</td>
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<td>6</td>
<td>Wide mouthed vessel (large size)</td>
<td>Kata/Kata charu</td>
<td>5.24</td>
<td>4.23</td>
<td>6.97</td>
<td>2.05</td>
<td>8.68</td>
<td>10.07</td>
<td>15.84</td>
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<td>9.31</td>
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<td>7</td>
<td>Short neck vessel</td>
<td>Hari/Dobar</td>
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<td>1.82</td>
<td>4.77</td>
<td>6.55</td>
<td>6.63</td>
<td>3.44</td>
<td>2.51</td>
<td>7.25</td>
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<td>4.32</td>
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<td>8</td>
<td>Wide mouthed bowl</td>
<td>Khali Bara/Japi</td>
<td>2.62</td>
<td>2.73</td>
<td>0.50</td>
<td>464</td>
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<td>9</td>
<td>Smoking pipe</td>
<td>Chilim</td>
<td>1.05</td>
<td>0.91</td>
<td>2.94</td>
<td>1.02</td>
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<td>Vessel with axle</td>
<td>Jay charu</td>
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<td>4.40</td>
<td>8.40</td>
<td>4.99</td>
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<td>13</td>
<td>Musical drum</td>
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<td>1.58</td>
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<td>0.14</td>
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<td>14</td>
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<td>3.03</td>
<td>4.50</td>
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<td>17</td>
<td>Lime pot</td>
<td>Bharaka</td>
<td>1.23</td>
<td>1.58</td>
<td>0.14</td>
<td>158</td>
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<td>Clay basin</td>
<td>Sikha/Khala</td>
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<td>1.92</td>
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<td>Basin like dice</td>
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<td>Wide mouthed bowl for cooking rice</td>
<td>Bhirar charu</td>
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<td>25</td>
<td>Basin on stand</td>
<td>Dhanadana</td>
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<td>1.11</td>
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<td>27</td>
<td>Shallow basin with punched lip</td>
<td>Chaki</td>
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<td>2.73</td>
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Source: Survey Data
As has already been said that the Hira potteries are never used for any kind of religious functions. Even the Hiras do not use their own products for rituals. This is a fact that the Hindu clients never purchased these potteries for any religious purpose. But for domestic use i.e. day to day offering of Chaki and incense stick in front of their household deities they may use this products. It is observed that the immigrant Kumar potters in urban areas procured these item at lowest rate from them and sold it to any types of client. However, the tribals and the converted tribals purchased these pots for religious purpose or use from the Hiras. The Hiras usually sold these potteries to the media man or whole sellers at home or in the market.

The above analysis justified that none of the item except the conventional types are produced by the Hira potters of South Kamrup regularly or frequently. Out of twenty eight types only one-fourth manufactured as conventional one whereas rest three-fourth is being fashioned specially or occasionally by certain potters of some blocks. As a matter of fact, the percentage of production varies from block to block. Moreover, production of pottery is directly related to the demand and marketing. Therefore, both demand and marketing control the presence of a ceramic type as well as their rate of production.