



ISSN: 0975-833X

Available online at <http://www.journalcra.com>

INTERNATIONAL JOURNAL
OF CURRENT RESEARCH

International Journal of Current Research
Vol. 11, Issue, 02, pp.1787-1791, February, 2019

DOI: <https://doi.org/10.24941/ijcr.34594.02.2019>

RESEARCH ARTICLE

CLAY SCULPTURES FOR WORSHIP IN EASTERN ODISHA (AN INDIGENOUS SACRED CRAFTSMANSHIP IN CLAY)

***Dr. Umesh Chandra Nayak**

Asst. Professor, (Department of Fine Arts, Amity University, Haryana, India)

ARTICLE INFO

Article History:

Received 25th November, 2018
Received in revised form
28th December, 2018
Accepted 19th January, 2019
Published online 28th February, 2019

Key Words:

Clay Sculpture as spiritual images,
Clay Artisan life,
Traditional culture of Eastern Odisha

ABSTRACT

Folk art is a higher form of culture in comparison to primitive art. The needs and peculiar problems of the village people's life find an expression in folk art. While satisfying the needs of the people, folk art attains a certain aesthetic level. Folk art is divided into two classes, viz. hand-made figures and moulded figures. The hand-made type is of a primitive pattern. Heads, eyes, eye-brows, lips etc of the figures are shown, but the legs are left out. In the moulded type a full human or animal figure is fashioned. Folk art although dwindling, is still a living reality in Odisha. Great skill is displayed in the making of dolls, toys, puppets, carvings on soapstone, wooden vessels, gate doorways, chests, palanquins, musical instruments, bridal costumes etc. Temple walls and walls of certain private houses are still painted. Drawing on canvas is still a practice in Odisha. Odisha's 'Patachitras' are famous in India and outside. Bowers of the pith flowers with figures of charming women are made on the occasion of 'Jhulana' (swinging festival of Radha and Krishna) on the full moon day of Shravana. Brass fishes, horn toys, filigree ornaments, a painted 'Farua' (a temple-like wooden pot in which Vermilion is kept), textile and soapstone work and 'ganjapa' (traditional play card) of Odisha still draw wide attention. Palm leaf as a writing material is now out of use except on some ceremonial occasion. Some palm leaf manuscripts are carefully preserved in the museum at Bhubaneswar as specimens of traditional drawings and paintings. Odisha has witnessed ceaseless human endeavour in the field of art, craft, sculpture and temple building activities for about 2500 years during her recorded history. Endowed with nature's beauty and bounty, Odisha boasts of a rich cultural heritage and tradition of music, dance, dramatics, art & crafts of many splendored varieties and forms; which elegantly emanate from its magnificent monuments, ancient caves, and rock-cut sculptures and innumerable temples found still intact with all its pristine glory and grandeur. This holy land with a hoary past, offers the quintessence of the multifaceted cultural profiles of Indian panorama. Art in all its myriad forms is so deeply ingrained in this state that the routine chores of the folk styles take sublime aesthetic expression of magnificent diction in intangible performing art idioms.

Copyright © 2019, Umesh Chandra Nayak. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Dr. Umesh Chandra Nayak. 2019. "Clay sculptures for worship in eastern Odisha (an indigenous sacred craftsmanship in clay)", *International Journal of Current Research*, 11, (02), 1787-1791.

INTRODUCTION

Idol worship is an integral part of Indian culture. It has a long journey from abstract to form, stone to clay, wood to metal, totem to beautiful iconography. The stories can easily traced in our ancient text, folk tells and in our collective memories. Artist uses variety of medium to make these images. Clay Idol in the Indian subcontinent has an ancient history and is one of the most tangible and iconic elements of Indian art. The Evidence has been found in the early settlements from the Indus Valley Civilization. My state Odisha is a state of indigenous art, craft and villages. The coastal belt is filled with heavy clay deposits in its river basins. The clay art was part of our ancient Kalinga kingdom. Pottery reached at its zenith at that time.

Baleshwar has an excellence and great stuff of this magnificent clay work. Traditionally the native people in village outskirts practiced this work. Mainly the socially and economically backward community professing the art was from low status and known for their *Kumvas* (pots) called *Kumvar* or Potter (who makes *Kumva* or earthen pots). Initially the native traditional potters made varieties of clay articles for their common day to day house hold uses. At the beginning different size of clay pots made but later the big size pots lessen in numbers. At that time they have no idea in proper process of decoration and designs. Gradually they learn and improve their skill and style. They started making idols, beautiful clay images and icons of the sacred village deity worshiped under trees and also of deities called *Gramadevatis* (Village Goddess) surrounded with animal figures; bulls, elephants, tigers, horse etc. In later days the ancient pottery slowly faded away. Rich donations transferred the goddess to

***Corresponding author: Dr. Umesh Chandra Nayak**
Asst. Professor, (Department of Fine Arts, Amity University, Haryana, India)

cement temples. Clay works reduced to limited level. Artisans of this profession are in terrible condition and giving up their work. Since modern day resources like cement and metal replace clay work, the traditional art dimed in course of change. My home town Baleshwar is store house of beautiful clay crafts. Artisans produce versatile clay products in different size. They adopt unique terracotta designs, decorative artifacts before and after firing compare to others. They use the BLACK FIRING, a traditional method which need high temperature and harden the clay work and make it long lasting. But it is little expensive than the red firing, which is now became cost effective for the poor artisans. So the black firing is now rarely alive among hand full of artisans. As a practicing contemporary artist I made a research project on this gradually vanishing pottery craft of my homeland and wanted to know experimentation on style and skill, method and material as well as curious to know how to bring this traditional indigenous art to a sustainable state and to revive this traditional craft in modern rural setup.

A large numbers of terracotta animal figurines are found in various archaeological sites in Indian subcontinent. These archaeological findings provide us with information about their artistic value, popularity, demand in the society and ancient Indian knowledge system. It also helps us in understanding the human animal relationship. The ongoing traditional practice and belief associated with terracotta animal figurines are often related to certain symbolic meaning and material worship. In order to know the ancient relation of human society with animal world along with associated traditional practices, various forms of worship and symbolism, a detailed ethnographic study was carried out amongst the inhabitants of Baleshwar town in the state of Odisha, where terracotta animal figurines play a very important part in their culture. The present paper show case the intangible heritage associated in the form of religious practices and symbolic depiction related to terracotta animal figurines. The most popular among them is worshipping of terracotta horse figurines by observing through festival such as "*Pana Sankranti*" and "*Uda Jatra*" respectively in the month of *Baishakha* (May-June). The associated popular legends and folklores provide us with the symbolic meaning of their worship along with its contemporary traditional religious faith and belief system related to animals. Such type of ongoing tradition provides us with ample scope to draw analogy for better understanding of our past.

Historical background

Baleshwar is one of the coastal districts of Odisha and lies on the northernmost part of the state. The district is surrounded by Medinapur district of West Bengal in north, Bay of Bengal in east, Bhadrak district in south and Mayurbhanj and Kendujhar districts lie on its western side. Bhadrak Sub-division was a part of Baleshwar district which on 3rd April 1993 became a separate district vides Govt. of Odisha Notification No. SRO-214/93 dated 27.03.1993. Baleshwar gets its name from the Persian word. 'Bala-e-Shore' meaning 'Town in the Sea'. The historical legends ascribe that the district has been named as per the Lord Baneshwar (Lord Shiva) of the town, which subsequently changed to Baleshwar during the Mughal rules. The history of Baleshwar district is the amalgamation of several cultures and civilizations. The present district of Baleshwar in ancient time was a part of Kalinga. Kalidas in his 'Raghuvamsa' while depicting the Digvijaya of Raghu states

that he (Raghu) crossed the river Kapisa, modern Kasai in Medinapur and came to the territory of Kalinga after leaving Utkal. This indicates that the river Kasai formed then boundary of Utkal and Kalinga and the present district of Baleshwar was in Kalinga during the time of which Kalidas speaks. Baleshwar continued to be a part of Kalinga under Mahapadmananda (4th century B.C.), Ashok (3rd century BC) and Kharavela (1st century B.C). The Soro and the Patikella copper plates dated respectively in the years 260 (579 A.D.) and 283 (602 A.D.) record the rule of a powerful king named Sambhuyasas who belonged to Mana dynasty. The territory under Sambhuyasas was called Tosali which was divided into Uttar Tosali and Dakhina Tosali. The present district of Baleshwar formed a part of Uttar Tosali. After Sambhuyasas the Manas became weak and sometime before 620 A.D. Sasanka, king of Karnasuvarna occupied the whole of eastern coast of Odisha up to Ganjam. A new rulling family under Soma Datta came to power in Uttar Tosali (then called Utkal). After Soma Datta his successor Bhanudatta ruled over that territory, but this family became weak after the death of Sasanka about 625 A.D. Bhanudatta acknowledge Suzerainty of Harsabardhana, who eventually occupied the whole of Odisha. It was probably during the time of Bhanudatta that the Chinese pilgrim Hiuen Tsang visited the Baleshwar region. Baleshwar region was remained under the Bhaum-Karas till their downfall in the middle of 10th century. After Bhoumas, the Somavamsis became powerful in eastern Odisha. Choda Gangadeva, the son of RajaRaja-I occupied Utkal in about 1110 A.D. From that time onwards the Baleshwar region was under the rule of the Gangas till 1435 A.D. when Gajapati Kapileswar Dev occupied the throne of Odisha and founded the Suryavamsi rule. In 1510 A.D. Sri Chaitanya came from Nadia and passed through Baleshwar to Jajpur and ultimately to Puri. The Surya Vamsi rule ended at about 1540 A.D. when Pratap Rudra Dev died. The district was annexed by Mughals in 1568 A.D. and remained as a part of their suzerainty up to the middle of 18th century, to be précised up to 1750-51.

Then the Marathas occupied this part of Odisha and it became a part of the dominion of the Maratha Rajas of Nagpur. The East India Company ceded this part through a treaty called 'treaty of Deogaon' in 1803 and Baleshwar became a part of Bengal presidency up to 1912 but the first English settlement came into existence in Baleshwar region in 1634 when Sahajahan was the emperor at Delhi. The first English factories were established in this region in 1640. During this period Dutch and Danish settlements were also founded in this region. Baleshwar as a separate district was created in October 1828 while it was in the Bengal presidency. With the creation of Bihar Provienc Odisha was diverted along with Baleshwar district from Bengal to Bihar, but with the creation of Odisha as a separate state on 1st April 1936 Baleshwar became an integral part of Odisha. The National movement of Independence surged ahead with the visit of Mahatma Gandhi in 1921. Similarly Praja Andolana was initiated against the ruler of Nilagiri state. The state of Nilagiri merged with Odisha in January 1948 and became a part of Baleshwar district. There are many historical monuments in Baleshwar district. Some of the major monuments include the rich sculptural remains in Ayodhya. The ruin of old Buddhist monastery and temple is there in Kupasi. Some of the ruin forts at the Jayachandi forest in Raibania are also there in the district. The major religious monument found in the district is the Lord Chandaneswar Shrine. The climate of the district is generally hot with high humidity. May is the hottest month and December is the

coldest one. Monsoon usually arrives in the district from mid of June every year.

Purpose of indigenous sacred craftsmanship: Most of the people of Odisha are Hindus. They once observed a number of festivals (*pujas, oshas, bratas, yatras* and *melas* etc.) throughout the year. Lightly, it is said there are thirteen festivals in twelve months. These festivals were highly religious and were the essence of Odiya life. The get together and the exchange of various types of *bhogas* (food offerings to gods) implied a lot to the people. Every family eagerly waited for these occasions. People in different parts of the State observed them as daily, monthly or seasonal events. In the long past, when many Odiyas were working outside the State keeping families at homes in villages, these were the occasions (most popular being Raja, Dashahara and Dola) to visit their homes to enjoy the festivity with family members and relatives. Come the solar month Jyestha. Young girls were seen celebrating Raja festival and swinging in *dolis* singing melodious Raja ballads in chorus and playing *puchi* and *chata*. In the lunar month Aswina, they observed Janhi osha worshipping *tulashi* plant and decorating the *chauras* with golden yellow *jhanhi phulas* (ridge gourd flowers) making shapes of Chandra as per its waxing and waning. The women observed many *bratas* and *oshas* besides *pujas* for the well being of the children and family members. Sunia marked the day when *rajas* and *zamindars* renewed the land leases and collected revenue from *ryotas* (tenants) in cash or kind which was known as *sunia bheti*. With passage of time and changes in social living, many of the festivals have progressively faded or observed in lesser enthusiasm. Many might not even heard of them. Along with festivals, many typical Odiya recipes are also forgotten. *Chitoupitha, chunchi patara* and *satapuri* etc. are now items of antiquity. Only in the Badadeula at Puri they are offered to lord Jagannatha on specific occasions.

Terracotta work has always enhanced the decor with their appealing beauty leaving people dumbstruck. Giving shape to varied figurines and plaques, these earthenwares are worth possessing. Terracotta craft involves using clay to prepare reddish brown unglazed earthenware intended as building material. The earthenware is hand modeled into various figurines, votive images and plaques. Terracotta is molded in many states into figures inspired by local legends and iconography, and has been practiced for centuries, since the Harappan civilization. The rural parts of eastern Odisha commonly display terracotta animal figures in places of worship or in the vicinity of temples. In some parts of Indian villages, the women folk create their own forms of Gods for worship and other decorative pieces for adorning their houses. The beautiful terracotta works are ideally used for decoration. People in states of Bihar, Bengal and Gujarat, prepare clay figures to propitiate their Gods and Goddesses, during festivals. Gorakhpur in Uttar Pradesh, is the home to exquisite clay figures of animals. The potters create the basic form by throwing separate pieces on the wheel and then joining them. They are then fired and then painted brilliant colors. In the South India, Tamilnadu is famous for the terracotta figures of the Aiyandar Deity. Huge figures are created as standing guards at the entrances of villages protecting the insiders from evil spirits. Gujarat also has votive figures like horses with riders, etc. Today, terracotta pot and pottery, though is not used for basic needs, a designer pot, nevertheless, has retained its pride of place for exciting interior design and decoration.



Village Goddess (Terracotta Masks)



Terracotta Masks for Worship



Terracotta Elephant for offering



Terracotta Horse for offering



Terracotta Horses offered to Village Goddess

Skilled pottery work still evokes a rare affinity, not known by any other form of craft. While retaining the aura and looks of natural terracotta, skilled Indian potters apply twists and turns, cut patterns and myriad shapes on the body to produce offbeat terracotta pots. A vast range of vases, candleholders, hanging pots, wall hangings, planters and bells are also made for home decoration and special occasions. Available in variegated designs these terracotta items seem quite popular with the international buyers. Terracotta handmade designer decorative tiles have also gained immense popularity, worldwide. Each tile design depicts a particular theme that, together with other similar tiles, makes a pattern. These terracotta tiles are used for walls and ceilings and not for floors. The designs in handmade terracotta tile range from geometric to floral and Indian folk designs. Clay potters of West Bengal, in Kolkata and its suburbs are famous for making clay arid terracotta idols of Hindu Gods and Goddesses like Ganapati (the Elephant God), Durga, dancing Nataraj, Shiva and Buddha. Superior terracotta craftsmanship is skillfully used for making sculpted murals. The craft being very old and ancient is undergoing a complete revival and experts feel it is still evolving.

Handicrafts Processes

Odisha handicrafts offer an unending variety of handicraft items, intriguing in its form and captivating in its beauty. The raw materials go through a number of processes, like carving, enameling, embroidery etc., and giving expression to the craftsman's skills. Some of these crafts take months to prepare. Exquisite and vibrant designs combine to make the most artistic artifacts. Indian handicraft items are so coveted that they are passed on from generation to generation. Cultural Heritage covers the non-physical cultural heritage, which includes the signs and symbols passed on by oral transmission, artistic and literary forms of expression, languages, ways of life, myths, beliefs, and rituals, value systems and traditional knowledge. The occurrence of large amount of terracotta objects in archaeological context with various forms gives us a complete platform to understand our past culture, history and society. The tangible material i.e. terracotta art, indicates the artistic and technological evolution of the contemporary society. These studies have shed very little light on different tangible and intangible aspects associated with the practice of worshiping animal figurine in Odisha. The surviving traditions related to making of terracotta animal figurines in eastern Odisha along with the associated traditional and oral belief system during *Pura Balada* ritual and *Lanka Podi Jatra*.

Traditional and functional role related to the survival of terracotta tradition has been studied, observed and recorded. Intangible Cultural Heritage is studied through the documentation of associated religious and ritualistic practices related to terracotta object. The data are collected through participatory field work in villages across the Baleswar town in eastern Odisha, documentation of terracotta making tradition and its associated form of worship. The artisans of Odisha have still retained that glorious tradition of clay idols making which has created a niche in the history of art of eastern Odisha. From miniature to life size sculptures with myriad of sculpting of excellence have been glorious traditions. Clay idol is an art form so universal in its scope, yet emblazoned with the distinct imprint of the native soil. Terracotta artifacts demand a very high degree of application and motivation. The polish on the final figure conceals an enormous volume of tireless toil and watchful attention. The terracotta products of the State have attained eternal beauty and attracted admiration of art-lovers all over the country. The artisans prepare the head portion and then the body portion and finally join the parts with clean finishing. These are then allowed to dry and the objects are put to fire in the kiln. These products are then polished with specific touch. The products are brown or black in colour. Odisha has a rich tradition of toys, dolls, puppets and masks. Among the best known are the wooden toys, gaily painted animals, fish and fowl that commented the wildlife of Odisha's woods and waters, some mythical animals, the most typical being the Gajasimha, a lion riding an elephant, apparently a ritual figure for one sees it on the temple doorways everywhere in Odisha. These dancing dolls, small sized and in flowing robes, are made of light wood with extremely flexible joints that make their movements so pleasing masks are carved out of wood and are painted brightly. These masks are used widely in Sahijatra.

Conclusion

The state of Odisha boasts of a strong ethnic handicrafts industry. It has, in fact, carved out a niche for itself in the spheres of appliqué work, metallurgy, silver filigree, stone and wood carving, etc. This form of handicraft is very popular throughout the state of Odisha. If one judges by the number of craftsmen engaged in the making of a particular craft, then dokra or brass and bell metal handicrafts will perhaps turn out to be single most important ones in Odisha. Under the category of Dokra crafts, one can find a number of items like figurines, containers with lids, lamp stands, etc. Most of these are inspired by the folk culture of the state. However, the queen of all handicrafts made in Odisha is the silver filigree, locally known as *tarakasi*. The town of Cuttack and few other villages in its district are renowned for their silver filigree items. The method consists of drawing silver through a number of small holes to make thin wires. These silver wires are then given desired shapes and designs and soldered with pincer and scissors by the craftsmen. It must be apparent from the numerous ancient monuments, caves and temples in Odisha that the art of stone carving here is very old. Contrary to the sculptors of other places, the ones in Odisha are adept at working with varied materials like soapstone, chlorite, and black granite and so on. The same is the case with wood carving in Odisha. Art as educational programmers should not only be concerned with the shifting requirements of professional capability, but ultimately with an exploration of the basic formation and trends in the various art and applied fields as they evolve in the days ahead.

With a rich Odishan tradition of hand crafts in our country it becomes all the more important and urgent to be written. Our people in general are indifferent to art and artists because of their ignorance and they are ignorant because of their distance from art. Nobody cared to tell what art was all about? How important it was? Everybody studies the lives of great scientists, writers, musician, etc. but do they read at all about art history, fine art, crafts, traditional art, creative art, and artists. It is absolutely necessary that our educational system should capture to the topic Odishan Art the history of art, so that it is properly initiated into the discipline of creativity at the right time. One's education is incomplete and life is impoverished without information positive awareness of art. There is no doubt that creative minds play a vital role in the growth and development of a nation whose prestige will ultimately depend, on the quality of her culture which in turn will be deter mind by the excellence of each of its components such as the art, crafts, letters, life styles and other forms of expression. Odishan Art at best has a special significance against the background of the evolving ethos of a nation. In later days the ancient pottery slowly faded away. Rich donations transferred the goddess to cement temples. Clay works reduced to limited level. Artisans of this profession are in terrible condition and giving up their work. Since modern day resources like cement and metal replace clay work, the traditional art dimed in course of change. My home town Baleshwar is store house of beautiful clay crafts. Artisans produce versatile clay products in different size. They adopt unique terracotta designs, decorative artifacts before and after firing compare to others. They use the BLACK FIRING, a traditional method which need high temperature and harden the clay work and make it long lasting. But it is little expensive than the red firing, which is now became cost effective for the poor artisans. So the black firing is now rarely alive among hand full of artisans.

REFERENCES

- Behera, P. K. 2001. *Excavations of Khameswaripali, A Protohistoric Settlement in the Middle Mahanadi Valley Orissa, A Preliminary Report, Pragdhara* 77:13-24.
- Benerji, Arundhati 1987. Terracotta Zhob Mother Goddess - A Study, in *Archaeological and History* (B. M. Pande and B. D. Chhattopadhyaya Eds.) pp. 117-134.
- Blurton, T.R. 1985. Tribal Terracotta Figurines in Gujarat: The Technology of their Production, *South Asian Studies* 1: 67-77.
- Coomaraswamy, Anada K. 1927. Early Indian Terracotta, *Bulletin of the Museum of Fine Art* 25: 90-96
- Dash, R. N. 2008. *Archaeology History and Culture of Orissa*. Delhi: Pratibha Prakashan.
- David, Nicholas and Carol Karmar 2001: *Ethnoarchaeology in Action*. Cambridge: Cambridge University Press.
- Delhi: Agam Kala Prakashan. Benerji, Arundhati 1995. Post Harappan Terracotta Art as a Source of Socio Economic History, in *Sri Nagabhinandanam* (L.K. Srinivasan and S. Nagaraju Eds.) pp.17-21.
- Dowson, J. 1888. *Classical Dictionary of Hindu Methodology and Religion*, New Delhi: Rupa and Co.
- Dutta, Anuita. 2010. A Study on the Meaning and Symbol of Terracotta Object Associated with Bastu Puja of Tghara West Bengal, *Puratattva* 40: 231-236.
- Eliade, M. (Ed.) 1987. *Encyclopedia of Religion*, Vols.1-16. New York: Macmillan Publishing Company.
- Hashimi, N.H. and R.R. Nair 1986. Terracotta and its Relation with Tribal Tradition of Worship in Gujarat, *Journal of Oriental Institute Baroda* 36 (1-4): 231-236.
- Hastings, J. 1908. *Encyclopaedia of Religion and Ethics*, Vol. I: New York: Charles Scribners's Son.
- https://www.academia.edu/34716915/Lathi_A_fortified_Early_Historic_site_in_Coastal_Odisha
- Kramrisch, S. 1939. Indian Terracotta, *Journal of the Indian Society of Oriental Art* Vol. VII: 89-111.
- Kumar, Krishna.2004. Survival of the Harappan in the Lower Ganga Yamuna Doab: An Ethno-archaeological Study, *Pragdhara* 14: 221-231.
- Lal, B.B. 1948. Sisupalgarh Early Historic Fort in Eastern India, *Ancient India* 5: 62-105.
- Mate, M.S. 1983. Review of Masterpieces of Indian Terracottas by M.K. Dhavlikar, *Bulletin of the Deccan College Research Institute, Pune* Vol. 37 (1-4): 190.
- Pandey, Nidhi and S. K., Yadav. 2010. A Unique Terracotta Mother Goddess from Karkat, *Puratattva* 40: 197-199.
- Patel, Ambala J. 1962. Folk Terracottas of Gujarat, *Journal of the Maharaja Sayajirao University of Baroda, Baroda* XII (1):63-70.
- Pradhan, S.C. 2000. *Archaeology of Orissa*. Delhi: Pratibha Prakashan. Pratap, Birendra 1973. A Technological Study of Terracottas Figurines in India before the Emergence of the Mould, *Journal of the Oriental Institute, Baroda* 22 (3):378-393.
- Sahay, S. 1975. Chronology of Indian Terracottas, *Journal of Bihar and Odisha Research Society, Patna* LXI (1-4):72-78.
- Saklani, P. M. 2007. *Ethnoarchaeology of Yamuna Valley*. Delhi: Pratibha Prakashan.
- Sankalia, H.D. and M.K. Dhavalikar 1969. The Terracotta Art of India, *Marg* 23: 33-54.
- Sarma, K. and B.P. Singh 1967. Terracotta art of Protohistoric India, *Journal of Indian History* 45(3): 774-98.
- Sengupta, A.R. 2005. *Art of Terracotta Cult and Cultural Synthesis in India*. Delhi: Agam Kala Prakashan.
- Sharma, R. C. 1991-92. Development of Sculptural and Terracotta Art in India from the Begging to the Mauryan Age, *Puratattva* 22: 65-68.
- Sharma, R.C. 1990-91. Terracotta as a Source of History and Art, *Pragdhara* 1(1):119-122.
- Sinha, P.K. 2000. Golbai, a Protohistoric in *Archaeology of Orissa*, (K.K. Basa and P.Mohanty Eds.), pp. 222-355. New Delhi: Pratibha Prakashan.
- Varma, K. M.1970. *The Indian Technique of Clay Modeling*, pp.19-23. Proddu Santineketan.
