

Chapter III. COLLECTION

III. 1. Introduction

In this chapter, I have presented the discussion about aims and problems of museum collection, in-depth study of landmarks of ethnographic museums in India, a comparative analysis of popular Dangi collections, discussion about collection theory and professional ethics, a study of collections policy, a full-scale study of acquisition methods for ethnographic materials, in particular, field collection, and a study of handling, storing and transportation of ethnographic collections.

Before I discuss collection, I may clarify the term 'collection' and 'collections' in the museum context. As a verb, 'collection' means to collect certain facts and/or things which have cultural and/or scientific significance for the purpose of museum activities as well as functions. As a noun, a collection is a unit of the collections.¹ A 'collection' means a piece of collected fact or thing, which corresponds with an object, a material or a specimen. 'Collections' mean over two pieces of collected fact and/or thing.

Previously, 'collections' manifested only purposefully collected three dimensional objects but nowadays they include not only three dimensional objects but also intangible information such as field data and museum information. Many conventional museum workers who are working at the art galleries or the art museums still think of "collections" as only masterpieces or historical artifacts. But today many museum professionals and progressive museologists use the term 'collections' as purposefully collected materials which are useful for the museum activities. In this connection, D.T. Gallacher (1983) has pointed out that "The massive and varied museum collections of today are identified by four main classes of objects: museum objects, original documents, models and library holdings."² But,

1. Burcaw, G.E., *Introduction to Museum Work*, Nashville, The American Association for State and Local History, 1975, p. 4.

2. Gallacher, D.T., "Planning for Collections Development", in Lore, Barry, and Dexter, G.D.(eds.), *Planning Our Museums*, Ontario, National Museums of Canada, 1983, p. 75.

the above-mentioned term "objects" is still comparatively limited which is meant only three-dimensional items. In the ethnographic museum context, museum collections include museum objects, field data and relevant information.

For example, if you ask a Curator of the Korean Folk Village "How many collections do you have in your museum?" he will reply "We have about 30,000 objects, 260 houses, 1,200 books, 40 photo albums and 30 slide film packs".¹ And further, he will add that "We have about 12 volumes of field work reports," to the museum collections. Of course, many public museums in India and the U.K. may not add photo² albums, field-work reports etc. to museum collections, but many private museums in Korea, Japan and the U.S.A. consider all of these as museum collections because they have invested money to collect the required data from the field, and further, they utilize the information for the museum activities as well as functions.

The museum collections constitute the essential component of a traditional museum. Without them a traditional museum may not exist. Hence it is fundamental that a museum carries out the function of collection.

III. 2. Aims and Problems of Collection

Aims of collection have changed according to the socio-economic situation and a specific intellectual environment in a society. "Consequently, the process of collecting not can be considered separately from the cultural characteristics of the society undertaking it."³ In the museum context, the aim

1. In the year of 1991.

2. Roy, Sachin, et al., *Anthropology Gallery: Introduction*, New Delhi, the National Museum, New Delhi, 1964, p. 15. The same author considers a photo as museum collection, e.g., "the Anthropology Department is proud of having a large collection of big-size (15" x 12") photographs", and see in detail of it, the same author (ed.), *Anthropological Collections in the Museums of India*, New Delhi, Indian National Committee of ICOM, National Museum, New Delhi, 1967, p. 13.

3. Cannon-Brookes, P., "Nature of Museum Collection", in Thompson, J.M.A., et al., (ed.), *Manual of Curatorship: A Guide to Museum Practice* (2nd), London, Butterworths, 1986, p. 115.

of collection and the process of collecting depend mainly on the character of a museum, the socio-economic situation and intellectual environment.¹ As the concept of museum has changed, the aim of museum collection will also change in the future. In the past, a museum was merely a storehouse of valuable objects and the aim was to bring valuable things under one roof. But nowadays the museum is expected to be an active cultural centre for study, various non-formal education and joyful recreation. Thus, the aim is quite different.

According to the character of a museum, the aims of collection are differently emphasized. In case of the national museums they must scientifically select and collect national significant materials which may give national identity at the international level. Not only the national museum but various museums also have their own functions and roles in their communities.

In case of the district museums they must collect facts or things which reflect identity or cultural significance at the district level, but also have may cultural and/or scientific significance at the international level. But the museum collections should be originated or found from the district. If committed to this philosophy a museum can obtain its own character and cultural and scientific significance at any level. For instance the Dangs district museum should have its own character which should be reflected in the museum presentation such as multi-ethnic tribal communities, their distinctive ways of life and their thick unique environment. Generally, it is not easy to distinguish a Dangi cultural material from outside. Only a Dangi or an expert can find out similarity or difference.

Besides, many people collect various kinds of materials such as antiquities, historical artefacts, masterpieces, rarities, treasures, etc. for the purpose of their business or their favourite hobbies. From the museological point of view, there are some similarities and differences between the museum collection and the personal collections. Firstly, the museum collection is public collection for the public even though a private collector collects something for the his own museum. But personal collection is only for the private or a particular group of people. The public collections should be open to the public unless the museum has particular problems related to conservation or security. But most of personal collections may

1. See, *Annual Report 1970*, The Metropolitan Museum, 1973, and Hoving, T.P.F., "Annual Report, the Metropolitan Museum", *Museum News*, May 1973.

not be required to be open to the public (except certain National Treasure designated by any Government as in case of Korea).

Secondly, in fact both the private and the public collections contribute to the preservation of the cultural or natural heritage in a society. Generally, the museums are expected to conserve their collections forever unless they are required to do de-accessioning for professionally sound reasons. But many personal collectors do not give guarantee about conserving their collections permanently. According to their interest they may dispose of the collections to obtain other benefits.

Thirdly, the museum collection may not be considered in terms of economic gain or loss when a museum acquires the requisite materials for the museum activities and functions. But the personal collection may bring socio-economic advantages and disadvantages when an individual collector selects and collects certain of his or her favourite materials.

The aims of museum collection directly corresponds with fundamental museum functions such as conservation, research, communication, and exhibition and for the purpose of study, education and enjoyment. Except quasi-museums like natural reserves, etc. a traditional museum may continually perform the function of collection, i.e. collecting is an essential museum function in perspective of a traditional museum. In a sense, a traditional museum continually need to collect the requisite museum materials and other related cultural and scientific things and facts. For the purpose of effective collection management, the traditional museums need to collect only the relevant and requisite materials and to recruit a qualified person who can scientifically deal with collection management.

In practice, one of the aims of museum collection is to preserve or record the past. This is partly true, because, for a very long time, all museums were primarily interested in what happened in the history. The aim of museum collection was largely historical. But the modern concept of museum collection is quite different. People visiting museums would like to know life as it is in many aspects, according to their own areas of interest or life as it will be because of great technological inventions and discoveries. The aim, of museum collection, therefore should be a good blend of both historical account and the existing reality leading to changes in the future.

The aims of ethnographic museum collections in the past differ from what is happening in new ethnographic museums. It is important to know that aims of collections are directly related to the overall aims of the museums. The shallow, superficial,

narrow, irrelevant aims of museums will be reflected in the similar aims of collecting work. That is seen in many museums which function as if they are storehouses. But museums are more than that. They have to explain and interpret their collections, and further, to provide people with cultural and scientific significance regarding certain facts or things to explore the reality. The ethnographic collection should take into consideration communities' identity and universality and diversity of human culture in relation to the environment.

In the museum context, the collections must open eyes of the visitors or users of museum resources to the total culture of each community. For this reason, one must appreciate the statement that we are still using outdated method in ethnographical museum of showing the people as a romantic and exotic people of the colonial era, thereby, ignoring the hard reality.¹

Thus the old aim of collecting things on highly personalized selective basis should be replaced by the objective of holistic and contextual collections. If the aim of collection is not consistent with scientific ethnography then even beautiful things acquired by a museum will lead to distortions of ideas. When we study the actual objects collected in many Indian museums, we appreciate the truth of this fact about distortion. Without actually naming particular museums, one may give some pertinent examples as follows:

(i) Many votive terracottas are displayed in the showcases in toys section. (ii) Many ritual masks are separately displayed on the wall in view of their aesthetic aspect. (iii) Many religious decorative wall paintings are separately displayed to look like framed pictures. (iv) Most of religious icons are displayed out of the actual religious context or life situation.

In fact, if the above-mentioned presentation is accepted as correct and sound, the anthropological, ethnological or ethnographical galleries should be reorganized as art galleries devoted to aesthetics. But the aims of ethnographic collection differs from those of art historical or antiquarian collection. Of course there are some controversies, between colonial attitude of presentation and nationalistic attitude of

1. Gautam, Mohan, "A Kaleidoscope of Culture ; Some Ethical Problems in Context to Tradition, Modernity and Social Change", in the Proceeding of the Pre-Congress Meeting on *The Problem of Ethics and Visual Documentation*, (Xth International Congress of Anthropological and Ethnological Sciences, New Delhi, 6-8th December 1978), New Delhi, National Museum, 1978, p. 5.

ethnographic presentation. There is no harm even if the aim of ethnographic collection is to acquire the most beautiful, eye-catching things created by the tribals but that is not the end of the work. Beautiful things may be used to attract visitors by making them admire the aesthetic and creative abilities of the concerned people. But it will be distortion to look at beautiful tribal objects only as works of fine arts.

In the past, in terms of colonial only attitude, most of ethnographical objects were dealt with as objects of curiosity and as having rarity. Therefore, many colonial museums presented the ethnographic collections out of the cultural context and/or separately displayed them of then regardless original function or meaning or exclusively in terms of aesthetic qualities. Such attitude is not correct.

The ethnographic materials should reflect the total way of life in a community. Without considering cultural context or significance, or original function, the true meaning of the cultural materials will be diluted. So how and why are those cultural materials required to be exhibited in an ethnographical gallery? In my opinion, anthropological, ethnological and ethnographical galleries must represent the relevant cultural materials in terms of holistic approach and in the spirit of non-ethnocentrism.

The aims of ethnographic collection may differ when a museum is established by the concerned communities themselves in order to interpret their own cultures. The insiders have better and more intimate knowledge of the nature, functions and history of the specific material. They know their community and their culture better than others. It is also true that their interpretation is more valid because of familiarity with own cultural environment. Such community museums will aim at widest representation of cultural objects cultural which have special or unique associations with well-known or distinguished local heroes, prominent artisans, with important events, ceremonies and strong emotive, collective shrines. They serve as reminders of the collective memory. This happens because most of the members of that community wish to share such experience again and again. Hence the aims of collection may differ according to the cultural situation and the requirement of the community.

It is found that the representatives of dominant groups of tribals tend to overwhelm the less powerful groups even in the matter of community museum collections. The less powerful groups may perhaps have ethnographically more significant material which should be included on priority basis as it is likely to be a requisite. For example, so far as Dangi cultural heritage is concerned, much of significant material belonging to the Gamits, Kotwalias, Mangs, etc. are less or

rarely present in existing museums. So the aims of collection should be equitable and fair to all sections of tribal population. In fact, special collection drives are necessary to compensate for the lapses or short comings in this respect in the past.

Some ethnographic museums perform under a presumption that unity of people should be illustrated through the museums. Another objective is that "The anthropological or ethnographic museum is meant to serve the community in the sphere of socio-economic development, national integration, preservation and propagation of culture etc."¹ The ethnographic museum may contribute to the socio-economic development of a community and national integration but these are not institutional obligations of the ethnographic museums. The aims of museum collection should correspond with primary museum activities and functions. Otherwise the primary activities and functions of the museums can be shrunk by the outside pressure such as unsound socio-political power. The anthropological or ethnographic museums have to show community characteristics and difference between various communities. They (museums) being cultural centres of study, education and recreation, should make acquisition of cultural traits with ecological factors strictly on merits.

For instance, the fieldwork for ethnographic collection from Kerala recently conducted by the Indira Gandhi Rashtriya Manav Sangrahalaya, Bhopal, deserves special mention as; (i) Collections aimed at visual education like illustration of the terms, ideas, and concepts. (ii) Collections aimed at representing process for education and illustration. (iii) Collections to analyse certain concepts or synchronization where new influences, are seen in the traditional design or prototypes. (iv) Illustration to show identity. (v) Collection to increase patronage.²

It is notable that the above-mentioned aims of ethnographic museum collection well represent the character, role and objective of the Museum. Thus the aims of museum collection equally corresponds with the objective and role of the museum in a community.

1. Das, A.K., *Museography for Ethno-Cultural Material*, Delhi, Agam Kala Prakasan, 1989, p. 20.

2. See, Indira Gandhi Rashtriya Manav Sangrahalaya, *Annual Report of Rashtriya Manav Sangrahalaya*, Bhopal, Indira Gandhi Manav Sangrahalaya, 1990.

III. 3. Ethnographic Museums and Collections

A. Landmarks in the Ethnographic Museums

(1) National Institutions

National Museums and museums of national importance with status of National Museum were developed and recognized by the recommendation of the Central Advisory Board of Museums (CABM) in 1956.¹ After the independence of India, for the patronage of art and antiquities, the Ministry of Education as central agency took upon itself the responsibility of development and re-organisation of the Indian museums. To give leadership in this direction, the Ministry has set up a National Museum in New Delhi directly under it and also has brought the museums of this category: National Museums, that of New Delhi, the Indian Museum, Calcutta, the Crafts Museum, New Delhi, and the Indira Gandhi Rashtriya Manav Sangrahalaya, Bhopal have anthropological or ethnographical collections in their possession. The Central Museum of Anthropology, Calcutta also has acquired various kinds of cultural materials at the level of national museum.

Especially, the Indira Gandhi Rashtriya Manav Sangrahalaya and the Central Museum of the Anthropological survey of India have acquired Dangi cultural materials by means of field expedition (purchase from the villages of the Dangs). The National Museum, New Delhi, has not collected any cultural materials from the Dangs. However, the relevant photographs and fieldnote regarding the Bhils are possessed by the Museum. The Crafts Museum has also not acquired any objects from the Dangs but the Museum represented the Warli wall paintings. Regrettably, the Indian Museum, Calcutta has not collected any material from the Dangs. The reason given for this indifference to Dangi cultural material is that formerly the Dangi culture was not well known to the museum workers, and furthermore, the Dangs is located far away from the Museum in view of transportation and communication.

The anthropological section of the National Museum, New Delhi was established in 1960, and the anthropology gallery was

1. Ministry of Education, *The Minutes of the Meeting of the Central Advisory Board of Museums* (New Delhi, 24-25th September 1956), New Delhi, The Central Advisory Board of Museums, 1956, p.p. 1-3.

opened to the public in 1961.¹ The collections of the Museum were acquired by Verrier Elwin in his field expedition from the 34 major tribes residing in Madhya Pradesh and North-Eastern India. The Verrier Elwin's collections are mostly tribal objects and few folk materials, of which most of tribal objects are originated from only the Central and North-Eastern parts of India. The collections cannot present the entire Indian culture but mainly represent the Central and North-Eastern Indian cultures (See, Fg. 12-1 to 12-4, Vol. II). Although the collections reflect a limited area, most of collections well identified by Verrier Elwin. About 2,000 ethnographic objects were handed over by himself to the National Museum, New Delhi by means of 'sale and purchase'.² Of course, the little payment made for the collections cannot match with the actual value of the collections. In any case the significant fact is that the collections will be permanently conserved in the National Museum as cultural heritage of India.

There are different methods of acquiring museum collections. The anthropological gallery of the National Museum, New Delhi, has mostly relied on purchases through Art Purchase Committee or on gifts³, while the ethnological gallery of the Indian Museum (formerly the Oriental Museum of the Asiatic Society of Bengal)⁴, Calcutta was set up through donation, field expedition and long-term loans. The ethnological collection of the Oriental Museum, as started with the inception of the museum in 1814 under the initiative and patronage of the Asiatic Society of Bengal.⁵ The collections of the ethnological gallery of the were partly

1. Roy, Sachin, *Museum of Man in India: Problems and Prospects*, New Delhi, The National Museum, New Delhi, 1972, p. 8.

2. Interview with A.K. Das, the Head of Anthropology Department, The National Museum, New Delhi, on 11th March 1993.

3. Roy, Sachin (ed.), *Anthropological Collections in the Museums of India*, No. 1, New Delhi, Indian National Committee of ICOM, The National Museum, 1967, p. 2.

4. Sarkar, S.R., "Survey of the Anthropological Museums in India -- Problems and Prospects", *Journal of Indian Museum*, Vol. XXXII- XXXIII, New Delhi, Museums Association of India, 1977, p. 41.

5. *ibid.*, p. 1.

opened to the public in 1891 and later completed in 1893.¹ This ethnological gallery was started on the basis of the entire collection which the Asiatic Society of Bengal handed over to the Indian Museum in 1895.² In fact the Asiatic Society of Bengal initiated the programme of its collection as early as 1784. It has played the role of pioneer to collect, to display and to preserve the ethnographical objects in India. The aims of ethnographical collection in both the museums are to preserve and to show the rich cultural heritage of India to the visitors.

The nature of the collections of both the museums is cultural, consisting of specimens of both tribal and folk culture from different parts of India. The National Museum possesses some specimens of physical anthropology while the Indian Museum formerly presented no paleo-anthropological specimens. In the year of 1987, the Indian Museum opened the Paleoanthropology gallery.³ Curiously enough, the prehistoric cultural artifacts in both the museums have been put under the archaeological sections, dis-associating them completely from the anthropological collections. Thus their anthropological sections are incomplete and reflect many weakness in omitting prehistoric cultural artefacts. Otherwise anthropological section should be renamed as ethnological section which may cover with most of social anthropological and ethnographical materials.

The Indira Gandhi Rashtriya Manav Sangrahalaya in Bhopal and the National Museum of Natural History in New Delhi were established as a part of the commemorative projects to celebrate 25 years of India's Independence. The whole idea was to have a complementary pair of national institutions. Together they are expected to tell a complete story of nature and man. The National Museum of Natural History (NMNH) is to begin with cosmic evolution leading to formation of the solar system and planets and then the story of animal life till *Homo sapiens* emerged. The next part is left to the Indira Gandhi Rashtriya Manav Sangrahalaya (IGRMS) beginning with *Homo sapiens sapiens* till the present time. The central discipline forming the conceptual basis of the IGRMS is anthropology. The IGRMS, as an institution, will be dedicated to the presentation of the human being in time and space, with accent on the change and diversity that have gone into the formation of Indian culture. In this connection, the museum attempts to portray human evolution, socio-cultural and

1. Indian Museum, *Indian Museum Calcutta -- A Journey through 175 Years*, Calcutta, The Indian Museum, 1989, p. 12.

2. op cit., Das, A.K., 1989, p. 25.

3. op cit., Indian Museum, 1989, p. 12.

environmental adaptation. Also, the museum will attempt to present a universal and integrated vision of human life.

The objectives of the IGRMS¹ are as follows:

- (i) To present an integrated story of human evolution and culture with special reference to India.
- (ii) To highlight the various cultural patterns in India and its underlying unity.
- (iii) To improve national integration.
- (iv) To organise indoor and open-air museums on three major subjects: a) Human Evolution and Human Variation, b) Culture and Society in pre- and proto-historic times and c) Patterns of culture.
- (v) To make arrangement to salvage and preserve the fast vanishing aspect of the Indian Culture.
- (vi) To support and conduct research in the related subjects and provide funds and cooperate with other similar institutions.
- (vii) To perform as a centre of research and training in museology and generate in the course of time a new museum movement in the different parts of India to present and preserve variety of cultural materials (See, Fg. 11-5 & 11-6, Vol. II).
- (viii) To undertake all such activities as and when considered necessary for the achievement of the above objectives.

The Indira Gandhi Rashtriya Manav Sangrahalaya collected 39 objects from the Dangs in 1987. These Dangi cultural materials were purchased from the Warlis, the Koknas, the Bhils and Tandels (?) in the villages of Mahal, Ambapada, Shunjaad, Baljaad, and Magot Dungari of the Dangs. In relation to the Warlis, the Tribal Habitat of the Indira Gandhi Rashtriya Manav Sangrahalaya represents the Warlis hut with utensils (See, Fg. 11-1 to 11-4, Vol. II).

The Crafts Museum, New Delhi was established by the All India Handicrafts Board on the occasion of Asia '72 as a special exhibition of rural crafts with various kinds of huts and artefacts from different parts of the country.² Then the nucleus of the Village was expanded for the Agri-Expo '77. The Village Complex represents the traditions of the rural India in which from village artisans to Master Craftsmen have made

1. Indira Gandhi Rashtriya Manav Sangrahalaya, *Annual Report of Rashtriya Manav Sangrahalaya*, Bhopal, Indira Gandhi Rashtriya Manav Sangrahalaya, 1990, p.p. 36-39.

2. See, Baxi, S.J., "Village Complex -- A Museum of Rural Arts and Crafts", *Journal of Indian Museums*, Vol. XXXV, New Delhi, Museums Association of India, 1979, p. 138.

creative arts and requisite crafts. "A craft object does not denote form and function alone, more than that it represents philosophy and a way of life of both its creator and its user."¹ The Village Complex represents their arts and crafts with their life style by means of open-air exhibition, demonstration and indoor exhibition (See, Pg. 14-1 & 14-2, Vol. II). In term of museum management, it is noteworthy that the open-air Village Complex and Crafts Museum together carry out the functions and role of an ethnographic museum. Of course, actual objectives of the Village and Museum are for the presentation and dissemination of Indian Art and Crafts ultimately for the public such as common people, students, tourists, traders, and further, artisans and craftsmen. Sometimes the Village Complex becomes alive on special occasions like national and international fairs, when it is full of visitors and when artisans and craftsmen enthusiastically carry out their own work on the open-air site.

The Craft Museum truly leads India in its multi-faceted approach to the documentation and display of Indian art and crafts.² The Museum has taken responsibility for not only collection and documentation of Indian material culture but also for the learning and teaching of various art and craft techniques. Nowadays it truly carries out a mixture of museum functions and activities such as presentation, preservation, education and recreation. For performing these objectives, the Museum takes the responsibility for collecting artisans and craftsmen's culture, even to the extent of recreating, smell, sound and all such finer experiences of human being.³ Thus, it can truly be said that the Village Complex and Crafts Museum has left a footprint on a new ground of museum collections management and ethnographic museum movement in India.

The Village Complex and Crafts Museum has not collected any object from the Dangs but the Museum has housed a few Warli wall paintings. All these wall paintings are not drawn on the traditional type of raw material, i.e. a bamboo-mat wall plastered with a mixture of cowdung and clay. However, all these paintings were drawn by the Warli artisans invited by the

1. Shah, Haku, "Design and Display", Proceedings of the Workshop on *Crafts India '86*, (New Delhi, 2nd Week, October 1986), New Delhi, The Crafts Museum, 1986, p. 106.

2. Huyler, S.P., "Patronage and Craft Potentials: Exploring Innovative Concepts of Selection and Display", Proceedings of the Workshop on *Crafts India '86*, (New Delhi, 2nd Week, October 1986), New Delhi, The Crafts Museum, 1986, p. 114.

3. See, Shah, Haku, 1986, p. 110.

Crafts Museum. Some of their works on the plywood boards, cloths with chemical paintings are displayed on the entrance wall of the Crafts Museum. So far as the ethnographic museums concerned, the work of imitating the original should be avoided by the museums but the work of reproduction or reconstruction should be allowed by the museums according to the state of preservation of certain original materials in museum collections.

The Central Museum of Anthropology, Calcutta was established by the Headquarter of the Anthropological Survey of India in 1982. The Central Museum of Anthropology is one of the few anthropological museums having a composite and an integrated display for the public.¹ The Central Museum of Anthropology has housed 16 Dangi cultural objects collected from the Dangs through field expedition.² Before opening the Central Museum, Calcutta, the Anthropological Survey of India has already collected the Dangi cultural materials from the Konknas and the Gamits communities in 1981.

(2) Zonal and State Museums

At present, India has seven Zonal Museums³ which were set up by the Anthropological Survey of India. Some of the zonal museums are purposefully located in tribal areas or nearer to the well known tourist places like Shillong and Udaipur. In Udaipur there is a zonal museum known as the West Zone Cultural Centre. The Dangs area belong to the West Zone which includes the member states, Rajasthan, Gujarat, Maharashtra and Goa. The West Zone Cultural Centre was established by the Anthropological Survey of India in 1986-1987. The Cultural Centre is known as Shilpgram the Rural Arts and Crafts Complex. The Cultural Centre and Shilpgram attempt to present the richness and diversity of Indian cultural heritage to the people.

The Cultural Centre has carried out a plethora of activities

1. op cit., Das, A.K., 1989, p. 27.

2. The author sincerely appreciates the Central Museum in Anthropology, Calcutta and the Anthropological Survey of India for supplying him with this information.

3. In case of "the National Councils for Science Museums (NCSM) has divided the country into four administrative units or zones and each zone has a regional museums of NCSM have almost the same kind of exhibits and activities and are centrally controlled." cited in Naqvi, Asif, "What is a Regional Museum ?", *Journal of Indian Museums* Vol. XLVII, New Delhi, Museums Association of India, 1991, p. 37.

-- camps, balotsavs¹, film shows in slums, prison workshops, theatre activities for the deaf and dumb, festivals for miners, rural masses, labourers.¹ The intervention of Shilpgram has played the role of generating an appreciation of the diversity of design and aesthetic sense in folk and tribal art, crafts and architecture. And further, "the Centre has developed the concept of Yatra -- a cultural odyssey from one end of the West Zone to another, bringing with it the flavours of colour, rhythm, traditions and customs, from all part of the country."² The aim of the yatra is to project the similarities and distinctions that underlie and enrich Indian cultural heritage. For performing of such kind of museum activities and functions the Centre and Shilpgram have collected various kinds of cultural materials from the member states (See, Fg. 7-1 & 7-2, Vol. II).

The Cultural Centre collected 56 Dangi objects from the Kotwalia community of the Dangs in 1985.³ All collected Dangi materials are displayed in Shilpgram at the Kotwalia's hut (See, Fg. 7-3 to 7-6, Vol. II).

In some of the States, under the administrative and financial patronage of the State Governments, anthropological collections are displayed and housed in the multipurpose State museums like the Museum and Picture Gallery, Baroda. The Museum and Picture Gallery, Baroda is the Headquarter of the Department of Museums of Gujarat. The Baroda Museum was established by H.H. Gaikwad, Maharaja of Baroda in 1894.⁴ In the nature of collection, its status is similar to a national museum, as it houses various kinds of collections from different parts of India and foreign countries. The Museum serves the public by organising educational activities such as gallery talks, educational film-shows, thematic exhibitions, guided tours, etc. So far as the museum collection is concerned, the Museum has played an important role of protecting and preserving various kinds of cultural treasures preventing them from going out of

1. Balotsavs: In attempting to prepare the soil for a children's movement to take root, the Centre has been organising multi-disciplinary camps for the urban underprivileged children of the Zone since 1987.

2. *ibid.*

3. The author sincerely acknowledges the West Zone Cultural Centre, Udaipur, for providing him with this information.

4. See, the Department of Museums of Gujarat State, *Museums in Gujarat* (2nd), Vadodara, The Department of Museums, 1986, p. 13.

the country. This is done by acquiring them by means of purchase, encouraging gifts, or acquiring them under the Treasure Trove Act. In this connection, the Art Purchase Committee at the state level has played its role in acquiring cultural treasures through purchase.

The objectives of the Anthropological section of the Baroda Museum is to promote research in anthropology and also to acquaint the visiting public with the cultural life of the people.¹ As early as in the year of 1895 the Anthropological section was opened to the public. Subsequently, in 1953, the entire ethnological gallery was renovated according to museological knowledge of that time.

The Museum collected about 3,000 ethnological objects which were mostly acquired by means of purchase or gift. They have been collected from various parts of India from near, by Songadh and Vyara to farther Assam, Nicobar, Nagaland, NEFA, and furthermore, foreign countries like Nepal, Tibet, Africa, etc. Although the Museum has housed some forest tribal objects collected from Songhad and Vyara nearby the Dangs district, it has no Dangi cultural materials. However, ethnographic collections of the Rabaris and the Kathis of Saurashtra region, the Bhavaiyas of Gujarat Plain, and those of *Sonar* (goldsmith), *Lohar* (blacksmith), etc. are displayed in the Museum.

(3) Tribal Research Institutes

It is unavoidable to mention the great role played by several museums of the Tribal Research and Training Institutes (TRTI) at the state level in India. Every state has, at least, one tribal research and training institute.² Generally, a specialized museum, the so-called Tribal Museum has performed a crucial function to support the main activities or objectives of

1. op cit., Roy, Sachin (ed.), 1967, p. 20.

2. Many Tribal Research and Training Institutes (with its Museum) were established, one after another, Bihar Tribal Welfare Research Institute, Ranchi, Bihar (1954), the Tribal Research Institute, Chhindwara, M.P. (1954), the Cultural Research Institute, Calcutta (1955), the Tribal and Harijan Research Institute, Bhubaneswar, Orissa (1955), the Tribal Research and Training Institute, Ahmedabad, Gujarat (1962), the Tribal Research and Training Institute, Pune, Maharashtra (1962), the Tribal Cultural Research Institute, Hyderabad, A.P. (1963), the M.L.V. Tribal Research and Training Institute, Udaipur, Rajasthan (1964), etc., which partly has been mentioned by Roy, S.(ed.) (1967), Sarkar, S.R. (1977), Som, Sujit (1983), Mahapatra, L.K. (1972) and Vidarthi, L.P. (1972).

the Tribal Research and Training Institute. Most of the Tribal Research and Training Institutes have similar objectives and carry out the following activities and functions. It has to serve as :

- (i) A centre for studies in tribal life, culture and development.
- (ii) A documentation centre cum data bank on relevant problems and development activities concerning various tribal groups of the regions.
- (iii) A coordinating centre for anthropological studies carried out in tribal region.
- (iv) A centre for doing micro-level planning in tribal areas.
- (v) A training and orientation centre for officers, extension workers, local officials, educators, tribal youths and leaders, voluntary workers.
- (vi) A centre for collecting and displaying tribal artifacts giving a vivid visual idea of the richness of tribal life and culture.

Such institutes have emerged due to certain provisions in the constitution of India. They are concerned with the guarantees of special status to millions of scheduled tribes and scheduled castes for their social welfare and security. The specific constitutional provisions were made with a view to helping the tribals in their development as well as integration in the national mainstream.

In this connection, a mention may be made to the appointment of a Commissioner for Scheduled Tribes and Scheduled Castes as per the provisions of the constitution. He was required to report to the Indian Parliament about the progress made by the tribal toward improvement of their standards of living. In the first report, the Commissioner emphasized the need for establishment of the Tribal Research and Training Institutes in all states where there was a sizable population of scheduled tribes and scheduled castes. The idea of the Commission was primarily to remove misunderstandings in non-tribals about tribal life and culture. For a variety of reasons, in India, there is a growing crop of prejudices and wrong notions about tribal population. One of the reasons is the gap between the tribal who prefer to live in relative isolation, and the non-tribal, who have failed to establish healthy contacts with the tribal. The Commissioner felt rightly that such a gap is not desirable for developing continuous and mutual understanding between the tribal and the non-tribal.

Hence the establishment of tribal research institutes was recommended for educating the non-tribal about the tribal. These institutes were expected to study the tribal and disseminate their findings, also to collect data on tribal life and culture which were not available in other institutions.

Most of the Tribal Research and Training Institutes have already fulfilled many of the expectations to justify their existence. In particular, they deserve credit for collecting tribal material of much significance during the last three decades. This does not mean that there is no room for improvements in their collecting activities. But whatever they have acquired has laid foundation for museum interpretation of tribal culture in India.

In particular, the Tribal Research and Training Institute, Ahmedabad has collected various kinds of cultural materials from most of the tribal communities of Gujarat, on the way of operating their projects regarding research, development and social welfare on the tribals and tribal areas. Many fieldworkers including researchers and their associates collected various kinds of cultural materials from the field. Most of the collections are housed in the Tribal Museum of the TRTI, Gujarat, Ahmedabad.

The Tribal Research and Training Institute has frequently carried out various kinds of projects regarding research on the Dangis and Dangs, development of the Dangs and social welfare programmes for the tribal communities. As a result, the Institute could collect 192 objects from the Dangs by means of field-collection. Most of them were purchased from the various tribal communities in the villages of Waghai, Pimpri, Kalibel, Bheskatri, Mahal, Ahwa, Galkund, Saputara, etc. in between 1973-1989. Out of 192 Dangi objects, 37 are displayed in the Tribal Museum of the TRTI, Gujarat, Ahmedabad (See, Fg. 3-1 to 3-6, Vol. II). The Museum has played an important role of collection, presentation, education and preservation of the Dangi cultural materials.

(4) District and Local Museums

Most of the district level museums are local museums which are governed by local bodies, like Municipality, Local Board, Panchayat, private body, etc. in perspective of administrative control. Reversely, some of the local museums are not district level of museums in terms of museum collection and their activities, for instance, the village museum and the local school museums.¹ Generally, the district level museums and local museums emphasis on locality in terms of cultural and physical

1. The concept of 'village' and 'school museum' were discussed by V.P. Dwivedi (1979) : "Changing Role of Museums In India", *Yojana*, Vol. XXIII, No. 3, February 1979, p. 10. It is believed that India has only a few 'village museum' like *Chotaudepur Sangrahalaya*. Nowadays, many North-European countries and East-Asian Countries have a number of school museums (institutional museum) and village museums (similarly smaller community museums).

environmental aspects of a certain region or area. In this connection, as Kenneth Hudson (1977) has pointed out that "Local -- say five-miles radius around the museum, Regional -- up to two hours' travelling distance from the museum."¹ Of course, in view of socio-transportation and communication, there are quite important differences between America and India. However, a regional museum may encompass a larger area than a local museum in terms of museum collection and presentation and museum services.

So far as local museums are concerned, the Lady Wilson Museum at Daharapur is the first attractive ethnological museum which has housed the Dangi cultural materials. The Museum was opened by Lady Wilson in 1928 under initiative taken by the H.H. Vijay Deviji Ranna, the Maharaja of Dharampur. Most of the collections were purchased by the Maharaja of Dharampur. The Museum has housed about 1,000 ethnological materials collected from area nearer Dharampur to Madras, and further, the Maoris of New Zealand. Mostly the tribal objects were purchased from the Konkanas, Naikas, Dhodias, Dublas, Rabaris, Warlis, Todas. In particular, tribal dresses, ornaments, object of crafts, musical instruments etc. were collected by means of field expedition (purchase in the field). Besides, the crafts of *Sonar* (goldsmith), *Khatiri* (weaver), etc. are housed in the Museum. It is strange that the Museum has collected only a few Dangi cultural materials like bamboo baskets, musical instruments, ornaments, etc. from the villages, Chankhal, Mahal, Kadmal, etc.

In terms of the Dangi cultural materials, the Saputara Museum is a nucleus. The Saputara Museum was established in 1970. Saputara is the hill resort of Gujarat. Therefore, the Government of Gujarat established the Saputara Museum for the purpose of representing the Dangi Culture to the people, especially, tourists and the Dangis. Previously, it was completely a district level museum representing its locality, but since 1993 some corridor show cases display outside cultural objects such as foreign art and crafts (See, Fg. 1-17, Vol. II).

The Museum as on 30th May 1992 had housed a total number of 647 objects collected from the Dangs, Dharampur, and some foreign countries. Out of 647 objects only 175 objects are collected from the Dangs and out of which 60 objects are ethnographical materials and 115 archaeological artefacts. In case of Dangi ethnographical materials, most of the cultural materials were purchased from Bhils, Konkanas, Warlis, Gamits, by way of field expedition. Strangely many ethnographical objects were collected from the former Dharampur and Bansda

1. Hudson, Kenneth, *Museums for the 1980s*, Paris, UNESCO, 1977, p. 77.

states in the beginning of 1970s. However, in case of archaeological artefacts, the Art Purchase Committee of the Department of Museums of Gujarat, on behalf of the Saputara Museum purchased 216 artefacts from a local archaeologist, D.B. Chitale. Out of the 216 artefacts, 109 artefacts were collected from the adjoining areas of the Dangs during his archaeological explorations. Except archaeological artefacts, most of the ethnographical objects are exhibited in the Anthropological gallery of the Museum (See, Fg. 1-1 to 1-20, Vol. II).

Furthermore, in the west zone and central part of India there are some ethnographic museums like the Shreyas Folk Museum, Sanskar Kendra, the Utensils Museum and Vishalla Village, Ahmedabad (See, Fg. 4-1 to 4-4, Vol. II), the Bhartiya Lok Kala Mandal (Folk Museum; See, Fg. 5-1 & 5-2, Vol. II), the Tribal Museum of the M.L.V. TRTI, Rajasthan, Udaipur, the Tribal Museum of the TRTI, Maharashtra, Pune, the Tribal Museum of Tribal Cultural Research Institute, Chhindwara, etc. (See, "Map 1-4). Besides, Archaeology Museum of the Deccan College was surveyed in connection with archaeological artefacts from the Dangs (See, Fg. 9-1 to 9-4, Vol. II). Regrettably, all these museums have not housed any Dangi cultural objects. However the Tribal Museum of the TRTI, Maharashtra, Pune, has collected the related tribal objects belonging to the Bhils, the Konkanas, the Warlis, the Gamit and the Kolis (See, Fg. 10-1 to 10-12, Vol. II). The Tribal Museum in Udaipur, and Chhindwara possess the relevant tribal objects regarding the Bhils which makes them significant in the study of tribal culture of India (See, Fg. 6-1 to 6-6, Vol. II).

B. Analysis of Popular Dangi Collections

For comparative analysis of popular Dangi collections, it is useful to refer to A.K. Das' "25 specific-categories".¹ They form a good basis to study the materials presently available in Indian museums (See, Appendix 3-1). His categorization of ethnographic objects has taken into consideration "cross-cultural and multi-functional" system, in other words, a process of cross-referential identification and scrutiny. All the ethnographic materials of a museum are to be initially identified with the '10 basic-categories'; "01 Food-quest, 02 Shelter, 03 Domestic pursuits, 04 Dress and adornment, 05 Offence and defence, 06 Transportation, 07 Trade and commerce, 08 Rites and rituals, 09 Art, 10 Games and amusements."² Both the basic and specific categories are applicable to Dangi collections.

1. op cit., Das, A.K., 1989, p.p. 47-48.

2. ibid.

Amongst the national level of museums, only the Indira Gandhi Rashtriya Manav Sangrahalaya, Bhopal, collected the Dangi cultural materials from the Warlis, the Koknas, the Bhils and Tandel communities. The museum workers of the Indira Gandhi Rashtriya Manav Sangrahalaya directly made field-collection in the remote villages of the Dangas from 28th May to 1st June 1987¹. The selected villages² are located in the remote region and thick forest. In view of my field experience, the above-mentioned period was good for the ethnographic fieldwork and field collection. Hence, they could collect rare wooden masks which are used in *Bhaveda* dance on the occasion or festivals like Holy. The collected Dangi ethnographic materials can be put into the following categories: Food-gathering utensils (five bamboo baskets for storing grain, roti and fish), Hunting tools, (two rat traps), Fishing tools (six objects; fish traps and nets), Plant cultivation tools (two objects; bamboo mat and seed basket), Logging tools (two sickles), Common technologies, (five objects; basket and brooms), Tools and Mechanism, (wooden mortar and grinding stone,) Weaponry, (three objects: bow, arrows and axe), and Performing art (eleven objects; wooden masks, flute and string musical instruments).

As the results of analysis of the existing Dangi ethnographic collections in the Indira Gandhi Manav Sangrahalaya, there are lacunae in terms of holistic approach for the purpose of museum presentation. To create authentic atmosphere in the open-air tribal hut, the Museum must supplement the insufficient cultural materials regarding Domestic activities, Dress and Adornment, Transportation, Trade and Commerce, Rites and Rituals, Games and Amusement. Of course, the Museum may not be able to collect all Dangi cultural materials, but it must continually collect as much as possible to fill in the above lacunae. Unless it shows the "a set of cultural objects"³ with ways of related life and physical environment to the visitors, the role

1. The author expresses his sincere thanks to the IGRMS and Acting Director Mr. Vikas Bhatt for providing this information with him.

2. The names of villages are Mahal, Amabapada, Shunjaad, Baljaad and Magot Dungri.

3. It means a group of the related objects in a cultural context. For instance, a kitchen consists of a requisite fireplace or a substitute of that, a stove or microwave-oven with various kinds of kitchen utensils, etc.

of the Museum may be reduced to a passive storehouse and the objectives of the modern museum may not be accomplished. Otherwise, the museums may not be attractive to the public who expect to see and learn the total ways of life, and furthermore who wish to find material culture with the relevant cultural activities meaningfully displayed and demonstrated in the anthropological or ethnographical museums.

The anthropological, ethnological and ethnographical museums must show the authentic cultural context of materials to convey correct information and offer emotional experiences to the viewers. Of course, aesthetic and art historical approaches are also applicable to the ethnographic objects but the Museum must consider which is the primary aim behind showing anthropology material in the museum. Anthropology is the study of man and his culture in relation to his physical environment. To study or to understand a particular culture in a society, one has to learn the entire ways of life with special reference to the material culture in a Society. Without considering these factors, the museum collection is similar to antiquarians' collections. But it is clear that what the IGRMS collected the Dangi cultural materials from the Dangs is part of the Dangi material culture and the collections are mostly objects of food-gathering, hunting, fishing, plant cultivation, weaponry, wooden masks, bamboo crafts, etc. from the major tribal communities, like the Bhils, the Koknas and the Warlis, and furthermore, a minor community, the Tandel.

Besides, the Anthropological Survey of India (ASOI) on behalf of the Central Museum of Anthropology, Calcutta operated field-collection in the Dangs in 1981. The ASOI collected the Dangi cultural materials from the major tribal community, the Koknas and a minor community, the Gamits. The collected Dangi ethnographic materials can be put into the following categories: Food-gathering (*garabi*, *dalki* and *charni*), Fishing (*mali*), Plant cultivation (*far* and *yeara*), Tools and Mechanism (*kurari*), Ginning, spinning, weaving (*tikta*), Performing art (*kirchia*, *ghangli*, *muhuri pawa*, *chunkiya* and *sar*), Games and amusement (*bahula*). According to orientation of collection, the scope and target of collection are quite different. It is believed that the ASOI collected the selected materials only for the purpose of research work. Otherwise it should collect various aspects of tribal ways of life and their material culture.

The West Zone Cultural Centre under the Anthropological Survey of India, on behalf of Shilpgram operated field-collection in the Dangs in 1985. The Centre collected the Kotwalia ethnographic materials in the villages Waghai, Chichigaontha, Dungarda, Ambapada, etc. by means of purchase. The collections are housed in the Kotwalia's hut in Shilpgram (See, Fg. 7-3 to 7-6, Vol. II). The total 56 objects collected by the West Zone Cultural Centre are as follows ; *wathki* (bowl), *thapuni* (pot),

chahathi (dipper), *thawasu* (rice-scoop), *ukhli* (wooden mortar), *tadaki* (bamboo mat), *kithki* (bamboo pot), *dasuro* (bamboo jar), *hupa* (bamboo tray), *dalki* (bamboo basket), *kurari* (axe), *dathli* (sickle), etc. Most of the collections falls into categories of Food-gathering, Tool and Mechanism and Sheltering.

In terms of museum collection, the Cultural Centre also needs to fill the lacunae like dresses, ornaments, various utensils and crafts, fishing and hunting tools, rite and ritual accessories, objects related to performing arts, toys, etc. The composition of Dangi ethnographic collections of Shilpgram and Rashtriya Manav Sangrahalaya suffer from similar lacunae. It is distinctive that most of open-air ethnographic museums in India are not much interested in collection and presentation of non-material culture.

The Tribal Research and Training Institute, Gujarat, on behalf of the Tribal Museum, Ahmedabad has frequently carried out field-collection amongst the Bhils, the Konkanas, the Warlis, the Gamits, the Kotwalias, the Kathodis communities of the Dangs from 1973 to 1989. A good number of Dangi ethnographic materials were collected by the fieldworkers of the Institute from the villages, Waghai, Pimpri, Ahwa, Kalibel, Bheskatri, Mahal, Galkund, Malegaon, Saputara, etc. The Tribal Museum has acquired 192 Dangi ethnographic objects of which 37 objects are displayed in the Warli hut (scaled model) and showcases like Dresses, Ornaments, Farming, fishing and hunting tools, Musical instruments, Masks, Toys, Bamboo crafts, etc. It is significant that the Tribal Museum collected 97 different items of Dangi ethnographic materials out of the total 192 ethnographic objects (See, Fg. 3-1 to 3-6, Vol. II). It is very significant that the Museum has acquired the Dangi ethnographic materials through field-collection. In practice, the Tribal Museum has well managed to get the Dangi ethnographic collections from the field-collection to the museum show-case including open-air style indoor exhibition.

For example, in the Warli hut, the following Warli objects are exhibited in the *watha* (lobby) and the *wasli* (living room cum storage); fishing trap, fishing net, bamboo baskets, sling earthen jars, earthen bowls, earthen jug, earthen pot, earthen jar, bamboo cup, bamboo needle for weaving a fishing net, wooden bowl, grinding stone, broom, Warli man and woman with their dresses and ornaments (See, Fg. 3-1 to 3-6, Vol. II). This is an example of good museum collections on tribal ethnography.

Although the Saputara Museum is a nucleus museum, the Museum has housed only 60 Dangi ethnographical objects and 115 archaeological artefacts from the Dangs. Regrettably, the Saputara Museum collected only 48 different items of the Dangi ethnographic materials while the Tribal Museum of the TRTI, Gujarat, Ahmedabad, collected 97 different items of those.

The collected Dangi ethnographic materials in Saputara museum can be put into the following categories: Food-gathering (one object; *topli*), Hunting (one object; *chikatiya*), Fishing (five objects; *mali* & *mala*), Common technologies (four objects; (*chostya*, *champu*, *chatu* & *kharadi*), Apparels and wares (four objects; *odhani*, *sari*, *pheta* & *uparna*), Ornaments (twenty objects; *kedmani sakli*, *gargoli*, *gundia*, *nath*, *saravani*, *kap*, *sarani*, *chousarani*, *sekali*, *gathi*, *bor har*, *kavli*, *har*, *darshana*, *yellera*, *basband*, *ambadia*, *Toda bandi*, *toradi* & *gend*), Charm and magic (one object; icon of *Narshin Avtar*), and Performing art (thirteen objects; *saranai*, *suratiya*, *thali*, *kathi*, *sangad*, *ghangari*, *tarpu*, *pavri*, *mohari*, *jodpara* & *tuni*). Amongst collections of the Saputara Museum, ornaments and musical instruments are relatively rich and attractive but other parts of ethnographic materials are very weak in terms of diversity of ethnographic collections. However, it is notable that the Museum has an open-air site for showing tribal huts and various ecological specimens (See, Fg. 1-19 & 1-20, Vol. II).

It is regrettable that the Saputara Museum has presented many ethnographic materials which were not made and used by the Dangis. All these ethnographic objects were collected in the adjoining areas like Bansda and Dharampur. What activities, functions and role of a district museum or a local museum has to be performed for the local people and the concerned community? The Saputara Museum must rectify this kind of distortion and wrong direction of collection as well as museum management. This kinds of ethnographic objects can give rise to a confusion in the visitors who expect to see and learn about the original Dangi ethnographic materials from the Museum. To whom or with whom is the responsibility for this matter? Museum visitors also have to give their idea and comments to the museum and the governing body for the sound development of the museum.¹ A museum must show the truth to the visitors. Otherwise the sound functions and role of the museum will be adversely affected.

The Lady Wilson Museum at Dharampur has collected a few Dangi cultural materials through field-collection. Most of Dangi ethnographic collections fall into categories of hunting and fishing tools, musical instruments, various ornaments and bamboo crafts which were collected from the Bhils, the Konkanas, and the Warlis. In the Lady Wilson Museum context, the Dangi ethnographic objects are part of ethnological materials. The Museum was interested in collecting several aspects of ethnology. The Dangi ethnographical objects acquired by the Lady Wilson Museum are mainly baskets, musical instruments and various kinds

1. The author, therefore, has already given his comment on the Museum to the governing body regarding the construction of a new Saputara Museum building (dt. 29th May 1992).

of ornaments. Considering the matter of collection management, it is recommendable that both the Lady Wilson Museum and the Saputara Museum may exchange their requisite cultural materials with each other. For example the Saputara Museum has some Dharampur objects while the Lady Wilson Museum has many Dangi cultural materials. Of course, the objectives of the Lady Wilson Museum differ from these of the Saputara Museum but there must be some common areas of professional interests for which exchanges and loans can be considered for mutual benefits.

III. 4. Collection Theory

A. Collection Theory

A museum may not be able to collect all materials which it requires. Hence it has to select certain requisite materials for the purpose of museum activities and functions. "Museums initially functioned as repositories for the collections, housing and representing as much as possible to the public, serving other interests of a handful scholars and the persons with specific interests.¹ According to the subjects of interests of members of a community, a museum may collect as many artifacts and specimens as possible.

The primary consideration of the museum collection should be the people. Without considering the specific museum situation, even if a museum manages to collect a lot of materials from the field, it will not be able to properly manage them due to various reasons like limited exhibition galleries, storing places, human resources, problems of maintenance and management, etc. Further, continuous and scientific care and conservation of materials are also required. A museum, therefore, has to select and collect the requisite materials only for the pre-determined target museum activities and functions. A museum however, may unexpectedly acquire the related materials through salvage collection, bequest, donation, gift, etc. which should always be welcome.

It is said that collection theory can tell us how to select and collect the requisite materials for both museum collection and private collection. It goes without saying that museum professionals need to learn collection theory, i.e. the logical and systematic expertise about the aims and processes of

1. Gupte, P.G., "Collecting Today for Tomorrow", *Journal of Indian Museums*, Vol. XL, New Delhi, Museums Association of India, 1984, p. 114.

collection. In the museum context, collection theory emphasizes the practical and systematic expertise. Most of antiquarians, appraisals and connoisseurs have also their own collection theory. But there are radical differences in terms of socio-economic point of view. Museum professionals are interested in cultural and scientific significance of a particular category of material while private collectors are interested in socio-economic aspect of a particular objects. Broadly speaking collection theory may encompass the principle of collection, collection policy, professional ethics, mode of acquisition etc. whatever related to a collection or collecting.

The principle of collection is based on intellectual necessity and emotional response. Activity of collection depends on these two factors. Although a certain material is required by the intellectual necessity, if the emotional response is unfavourable only a few museum or collectors would decide to collect such material. Vice versa is also true because similar phenomena will occur in view of intellectual response. If a museum needs to collect a certain ethnographic material whether it is valuable or useless the museum must collect it without reference to a layman's opinion. By the same logic, a person may wish to get a beautiful jewellery which is attractive to many people. But much more is involved in justifying collecting of such jewellery for a public institution which has to interpret cultural heritage. This principle is applicable to economics of making collections. In the field, a field-collector who is working for an ethnographic museum may attempt to collect a used broom in a cowshed for a cowshed exhibition. The owner of such a broom may wonder about it. However, there is a gap between the views of collector and the owner. To the collector, it is loaded with heavy cultural significance while to the owner, it is an almost useless object. The question is: "How can he collect the target material like the broom?" Of course, the owner may hand it over to him without any compensation. Otherwise, he will demand something in return. The collector has to consider three ways: (i) Purchase, (ii) Exchange a new broom for the old (iii) Gift. In case of gift, the collector immediately has to decide to accept such a donation personally or institutionally. Of course, during the fieldwork, he is not a 'personal collector'¹ but a museum field-collector.

1. Note: A collector is defined as: (i) The person who looks for objects or specimens in the field, to add to the museum's collection. (ii) The person who collects objects by trade, by taste or by hobby., cited in Oddon, Y., *Elements of Museum Documentation*, Jos, (Nigeria), Jos Museum, 1968, p. 59.

Practically many gifts are made on the basis of personal relationship between the owners and the field-collector. Needless to say, in case of donation, the collector must document the donation on the official paper then he must report the fact to the concerned museum authorities. Finally the museum must issue a certificate of the donation and express its thanks to the donor.¹ In my experience in South Korea, during salvage operation in 1988-89, the field-collectors always carried out a lot of daily necessities like soap, sugar, wheat flour, plastic baskets, etc. for the purpose of compensation to the Exchanger or Donor, on the spot.

B. Practice of Dangi Ethnographic Collection

The primary principle of ethnographic collection is to concentrate on the man and his culture in relation to his physical environment. The study of material culture is a passionate enquiry about the human activities including thinking and experiences and which directly or indirectly serves as the evidence of what actually has happened or has been happening. In this connection, any collecting work in respect of Dangi cultural materials cannot be oversimplified. The problems of the Dangi ethnographic collection are not many but the Dangis have a psychological attachment to their cultural property like kitchen utensils, agricultural tools and others connected with, hunting, fishing, or dress, ornaments and such materials. All these items constitute the important traditional material culture. Those are almost daily used by the Dangis, therefore, the Dangis are unwilling to sell them or part with them.

It is reported that sometimes even if after living in the field for six months, a fieldworker could not appropriately established good rapport with the Dangis to get rarities among the Dangi ethnographic materials like *pidi* (wooden chest for shrine: See, Fg. 42-5, Vol. II). A sample survey shows that between 75 to 85 percent the Dangis are determined not to sell their belongings. Even though they are poor, they have no desire to give away even their used material. Hence, the museum field-collectors may show great patience and convince the Dangis about how it will be in their own interest to give materials to the museums for educational purposes. Fortunately, in my recent field experience, many Dangis are found ready for selling even their used materials to both tourists and researchers, in particular, at Saputara, Navgam, Malegaon, Ahwa, Waghai, etc.

1. Such procedures of collection were carried out by the Korean Folk Village Museum in the author's working days.

where many outsiders have been to see and to study the Dangi culture. If the Dangis feel alienated, they will not support the museums campaigns to become a cultural centre for study, education and recreation.

It is in the Dangis that honest, conscientious and professional perfectionist will be severely tested against the normal temptation of getting things without associated ethnographical meaningful data. It is believed that the Dangis take time in testing the outsider's morals before accepting their bona fides. So museum workers will be foolhardy to rush into the act of acquisition of cultural material along with authentic data from the Dangi persons without building rapport. As mostly the local people are not money-minded, good relationship with them cannot be purchased. Those who have been successful in this field in the past were accepted as friends because both parties could build good friendship. The fieldworkers in the past were friendly with children. Even Dangi women also were not afraid of the fieldworkers. They, therefore, gave abundant ethnographic data to the fieldworkers.

There are some inaccessible places in Dangis where academically significant events can be studied and recorded before collections are thought of. These places are remote and hard to reach because of forests and hilly areas with hardly have any good motorable roads for comfortable journey. Many such events take late in the evening place after dark and in places which may frighten even the brave urbanites.¹ Museum workers who wish to make comprehensive ethnographic collections of objects as well as recordings both audio and visual, will have to face great hurdles. Arm-chair speculative theoretical museology has no magical formulae to help the field workers under these circumstances. The cunning foxy hunters of antiquities have no temptation to go into the interior of the Dangis for such ethnographic material. Only those who have single-minded devotion and love for Dangi heritage can accept the hard tasks in the spirit of a mission to collect things along with relevant data. No wonder, such well documented collections are rare in the museums of India as far as the Dangi culture is concerned.

Some problems of ethnographical collections in the Dangis are peculiar to the region. For example, the silver rupee of the pre-Independence India had "Queen Victoria's bust" on it (See, Pg. 28-8, Vol. II). It was much valued and was collected

1. During the author's fieldwork in the Dangis, he and his field-assistant many time encountered with many wild animals, especially, big poisonous sepernts on the road in monsoon at night on the return way from the remote villages like Kakshala, Linga, Pandva, etc.

universally. Even if paper currency was available in countryside, the silver rupee was extremely popular. That also figures in vernacular languages, idioms and peoples estimate of their worth. So from the "Queen's bust" as represented on the coin, the word *putala* or *putali* came to be associated with the silver rupee and the ornament. The rupee was integrated into the women love for ornaments. A necklace having these rupees as main decorated elements was known as *putli*. For that purpose, such silver coins were taken to goldsmiths and looping rings were attached to them by soldering. Then a group of them was held together in strong thread for wearing around necks. Dangs had hundreds of such necklaces in use, each having many silver coins. When there was imitation and the price of gold and silver rose sharply in relation to the real value of a rupee, the smart traders realized that one such old rupee can be exchanged for many prevailing rupees either in less price silver coins or in paper currency. From that understanding of new commercial opportunities there was a run on such popular Dangi ornaments.

A sad part of this story was the role played by the officials or social workers in the past. They were willing to please their higher officers or other patrons by pressurizing the poor Dangi to part with their necklaces of Victorian coins. It cannot be estimated exactly the proportion of such coins ending up in melting pots of goldsmiths and those which went into the private homes of the well to do. But the result was the de-culturation of the Dangi tribal communities. There is so much professional talk about the rich nations of the world taking away the cultural heritage of the poor nation. Large number of agencies are busy passing resolutions on the subject and recommending stoppage of such transfer of cultural wealth from the developing countries to the developed ones. Many measures are suggested for the "restitution" of cultural wealth. In view of that the picture of Dangis as a place of cultural rape comes into sharp focus. Thus it is necessary that field-collectors who are interested in collecting such special features of the Dangi ethnographic materials should make efforts to salvage whatever is left in Dangs and in private collection but without deceiving illiterate Dangi owners of *putli* necklace or Victorian silver rupee coins.

As a direct consequence of the great difference between the codes of conduct of the Dangis and outsiders, it is not wise to show too much interest in the private life of the local people even for museum work. A field-collector is most likely to do exactly that not out of any bad intention but to get familiar with the people for his museological targets. In the past, anthropological museums were ready to great exotic curiosities and rarities. Most of the existing collections consist of such assorted materials. But modern practice is to get all related materials together in order to represent the total ways of indigenous life, whether it may be a ritual or a making tools.

For that reason, a wise field-collector goes for a complete set of cultural materials specially of used materials instead of new things purchased in the market. But here collecting work encounters some special difficulties in the Dangis.

In the first place, the Dangis are mostly unwilling to part with the things which they are using. There is a sense of attachment. The things have associations and subjective value. Even if a field-collector is willing to exchange better objects, the Dangis do not share their enthusiasm. They would continue to use things with which they are familiar. So the field workers will have to use utmost tact in procuring used material.

Secondly, when a complete set of related things is demanded, the Dangis may be shocked. Their familiar world is threatened in sentimental terms. No doubt, such a set will be of great importance to recreate a special vision of the Dangi way of life either day to day or of a ritual or ceremonial even. But such collection will not be easy. To be able to do so, ethnographic museums may recreate such cultural context in the museums. Hence mere snatching things and taking them away will only upset the Dangis so much so that there will be no co-operation in future not only to the guilty museum but also to other museums or fieldworkers.

III. 5. Collections Policy

A. Collections Policy

A museum is one of institutions which has to serve a community and its public. An institution must have its own policy in this respect. The question is "What kind of collection policy is required in case of the ethnographic museums?" The policy must be established on the basis of the existing museum Laws, Acts, Rules, and the relevant legal instrument incorporating the institution. It must also equally correspond with the "institution's statement as expressed in a document that defines institutional goals, purposes and objectives, developed from, and in support of, its instrument of incorporation".¹

What is the difference between collection theory and policy? Collection theory is based on a logical systematic

1. Hecken, D. and Tanner-Kaplash, S., *Collection Management: Principle and Practice* (Museum Operations Manual), 1985, p. 2.

expertise about the process of collecting while collection policy is based on the legal instrument regarding collections and collecting. Generally, collection policy is quite flexible while collection theory is almost stable. Collection theory is like a permanent friend of museums. Both are very useful for collections management. In this connection, D. Hecken and S. Tanner-Kaplash (1985) have stated that "a collection policy, although comprehensive and concise, must also be broad enough to allow for a certain flexibility in its implementation."¹

"The terms 'collections policy' and 'acquisition policy' are often used as if they were interchangeable, and policies under either name frequently include statements not only about acquisitions but also about disposals and loans."² Among the museums printed collection policy, the terms acquisitions and deaccessions (Ontario Museums Association, etc.), collections and de-accessions (the British Columbia Provincial Museum, etc.), accessions and deaccessions (Manitoba Museum of Man and Nature) are preferable. At present many museums have their own collection policy including subdivisions: accessions and deaccessions. However, some museum have their own collection policy including subdivisions: acquisitions, disposals and loans.³ Most of museums have similar work in accessioning, lending, borrowing and disposing of museum materials. It is recommendable that an ethnographic museum establishes its own collection policy including subdivisions: accessions, loans and disposal.

The establishment of a museum collection policy requires good knowledge and experience about museum work and should be delegated to a group of curatorial, administrative staff members and museum authorities involved in strategic aspects of collections management. So far as a collection policy is concerned, it must contain a commitment to two important concepts of collections management, accepted and promoted by the museum professionals. One is that collections must be utilized and the other is that the museum cannot house the irrelevant collections. Therefore, a museum may state the requisite materials and scope of its museum collecting activities to the public or community.

The ethnographical collecting work is not mere a "grab and run" affair. Collecting significant ethnographic materials includes collection of data not only about the specific objects

1. *ibid.*

2. *ibid.*, p. 3.

3. See, *ibid.*, p. 7.

but also about the concerned people. In fact, modern ethnographic museums are concerned with the man, more than with the objects. Especially, the collecting is not of objects, as such, but of objects which are documented. Most of ethnographic collecting cannot be done in a visit, on the spot, as if it is a one time affair. Generally, it takes long time from few hours to years to study what is to be collected. Hence several museums interested in collecting ethnographic materials have to cooperate.

If qualified ethnographers are on museum staff, there is no need to invite outside experts for collecting task. In fact, it is possible to conclude that many persons who are not museum staff would willingly cooperate in museum's collecting task. But they feel frustrated that they cannot lend any active help because the present functioning of museums is not conducive to such voluntary cooperation. The leaders of ecomuseology are strongly urging the museum staff not to assume that all museum work can be satisfactorily done by the paid full-time staff. As the demand on museums for different kinds of services has increased, the museums with their limited resources cannot satisfy these demands without involving members of public.

In museum collecting work, not only several museums can come together but also several experts can participate together. The wisdom of coming together of various individuals and agencies for the purpose of scientific museum collecting work will be universally acceptable. But by and large, the difficulties are found in the shared viewpoints by the participants. For example, representatives of the governments may follow the predetermined policies while non-governmental participants may have more flexible views. On the other hand, more academically minded and liberally educated participant would stop to inquire what the concerned local community wants to happen to their environment. Hence one approach appears to be "formular" and "conceptual" and the other approaches seem to be vastly creative, "future oriented" and "eco-friendly".

In the conventional museums, both in the past and present, collecting is supposed to be a continuous activity. The holdings of a museum were expected to expand, come what may. The museum authorities not only waited for unlimited opportunities to add to the number of their acquisitions but took pride in overcrowded storages and public galleries with evergrowing collections. It is universally acknowledged that every museum has to recognize its limitations. It has space constraints. It also has limited expertise to take care of its collections. Therefore, collecting is not to be undertaken without estimating the cost of maintenance, conservation etc., in terms of human labour and other inputs. This idea is spreading not only in India but also in several other countries. But the consequences of the absence of such considerations create

grave problems.

The modern concept of "projection of a museum's collection size"¹ amounts to a very careful study of the following ; (i) Museum's ability to care and conserve its possessions, (ii) Storage capacity at present and in future, (iii) Available professional expertise, (iv) Space for exhibitions in which collected objects are installed, (v) Financial limitations of the museum, (vi) The possibility of the use of collections as resource by the different classes of people, and (vii) The observed rate of acquisitions during the past five years.

If the above infra-structural capacities are seriously taken into account it must be necessary to appreciate the wisdom in elaborate planning of future museum collections. For example, it is indicated in recent professional surveys that the average time for conservational treatment of one museum object is four hours.² Each museum has limited conservation expertise. It was reported that a qualified conservator could manage and treat about 500 deteriorated objects every year. In practice, he could properly treat two objects per day of eight working hours based on about 250 working days in a year. Actually even the figure of 500 objects per year is on the optimistic basis.

Moreover, in terms of ideal storage conditions, the exercise of "projecting collection size" is an important duty of all museum authorities. At one time in the past, museologists were vague in generalizing about the ratio of space for exhibition and storage of museum holdings. This is reflected in the ratio recommended for the "public" areas and "services" areas in planning museum buildings. When I participated in planning of a project in the Korean Folk Village Museum as a Curator, the Museum decided to have a ratio of 60 : 40 for the public areas and the service areas. That was meticulously followed in the organization of an indoor folklore museum in 1987. But this cannot be a fixed formula universally.³ Nowadays, there are elaborate ways in which ideal storage needs can be calculated for each category of museum materials like a bullock-cart, a bamboo basket, a hoe, a necklace, a pantomime paraphernalia, etc. Not only that but storage needs of vulnerable objects also will differ from each other which are physically sturdy and uncorrosive.

1. op cit., Gallacher, D.T., 1983, p. 77.

2. ibid., p. 78.

3. Baxi, S.J., "Building and Lighting" in Baxi, S.J. and Dwivedi, V.P., *Modern Museum: Organisation and Practice in India*, Delhi, Abhinav Publications, 1973, p. 35.

There is a vast difference between the theory of museum collecting work and the practical application of the various principles. Both are two sides of the same coin of modern museology. Every museum has a permanent responsibility of holding its collections in trust for its public. In practical terms, to hold something in trust means respecting both the significance of the object and the community for whom the collection is made by promising solemnly that it will be made accessible as and when needed. The meaning of accessibility in the museum context is not simple. It does not mean unlocking the stores or putting things on view in the public galleries. That was the old oversimplification.

The modern concept of accessibility is elaborated very adequately by D.F. Cameron (1972).¹ He has rightly differentiated between "physical access" and "intellectual access" to museum collections. The idea of holding collections in trust, for the public, amounts to building a systematic relationship between each acquisition and comprehensive data about it. That data might be for the curator to create his interpretative exhibits for those who want to know as much as possible about the collections. Both will be frustrated if collecting work is undertaken in haphazard fashion. There are certain difficulties in maintaining the balance between acquiring things for museums and simultaneously obtaining adequate, dependable data about those things.

In practice, so far as the collections are concerned, museums at the national level have to keep the national prestige through various museum functions and activities, especially, collecting materials from the whole area of the country and presenting collections at international level of quality. Of course, the specialized museums have to focus on collecting their specific materials only at the international level of quality. The museums at the national level cannot collect only the national treasures, masterpieces, rarities and high quality materials because they unexpectedly can collect various materials through excavations, field surveys or salvage operations. In case of specialized museums at the national level, they might also be faced with similar difficulties to collect their requisite materials because they have a limited scope, subject and materials. If the museum has its own collection policy, it may not face any serious difficulty in connection with collections management.

1. Cameron, D.F., "Museums and Public Access : The Glenbbow Approach", *The International Journal of Museum Management and Curatorship*, 1972, p.p. 177-196.

B. Deaccessions and Disposal Policy

Despite of the trend of ever-expanding museum materials, it is now clear that reasonable limits are needed on the scope, scale, and size of museum holdings. In order to be able to maintain museum collections scientifically, selective disposals may sometimes be required because of a limited storage place, lost authenticity and physical integrity of an object and where the museum is not ready for proper caring the concerned object. Therefore, a well developed museum attempts to specialize its holdings, and to make public its holdings including the wanted materials and overflowing objects, to expand existing museum space, and stick to its objectives and target activities, then the museum can fulfill its goals.

According to the Manitoba Museum of Man and Nature, its Deaccession Policy states as : "Except in the case of temporary and permanent loans, the Museum will not acquire materials with a definite intention of eventual deaccession."¹ This is an important statement because the Museum clarified its limits regarding maintainance of museum materials. Further, Stuart Davies (1987) pointed out five categories of objects which social history curators might wish to dispose : (i) items now considered irrelevant, (ii) items in poor condition, (iii) multiple examples of items, (iv) poorly documented items, (v) items occupying space required for more important items.² In practical, there are some controversies regarding selection and identification of the materials for the deaccessioning. Generally, each collection contains its own value but an object which is physically in poor condition and poorly documented must be disposed. It is difficult for the museum authority to dispose those non-necessary items.

"Prior to deaccessioning, the materials will be thoroughly researched, documented and photographed (except as prohibited by accidental loss or destruction), and the process of deaccessioning will be completely documented on standardized

1. op cit., Hecken, D. and Tanner-Kaplnner, S., 1985, p. 12.

2. Davies, S. "Social History Collections" *Journal of Museums*, March, 1987, p.p. 130-131., cited in Fleming, D., "Immaculate Collections, Speculative Conceptions", *Journal of Museum Management and Curatorship*, October, 1991, p.p. 263-272.

forms."¹ These records will be permanently kept by the museum. Every deaccession requires utmost caution and may be done after the recommendation of the curatorial staff.

The final decision regarding deaccessions will be made by the museum authorities' written approval. Of course, it requires that the museum make public announcements before disposal. In case of the Manitoba Museum of Man and Nature, after making public announcements through the appropriate media three months prior to the proposed date of disposal, and if the Museum has received no objections, then only it proceeds with deaccessions of the materials through sales or exchanges.

Before proceeding with sales or exchanges on the basis of deaccessioned objects the fact may be publicized through advance notices or documentation of the material will be duly publicized. "This precaution makes public the intention of the institution and may save it from future accusations of secretive dealings."² Besides the British Columbia Provincial Museum states other two methods of deaccessioning ; (a) by transferring stewardship to other institution capable of offering them an adequate standard of curation, and (b) destruction.³

III. 6. Museum Professional Ethics

A. Institutional Ethics

Any society or any institute in the world has its own ethical rules or standards of practice whether they are written or not written. In this connection, D. Hecken and S. Tanner-Kaplash have mentioned that " Every museum has an obligation to make its position known with respect to these standards, for the protection of the institution, the staff and the public alike."⁴ It is natural that a museum, as one of the socio-educational institutions, needs and requires to formulate

1. Hitchcock, Ann, "Collections Policy", *Gazette*, Ontario, Canadian Museums, 1980, p. 47.

2. *ibid.*, p. 13.

3. The British Columbia Provincial Museum, *Collection Policy of the British Columbia Provincial Museum by Senior Staff*, British Columbia, Canada, The British Columbia Provincial Museum, 1982, p. 9.

4. *op cit.*, Hecken, D., and Tanner-Kaplash, S., 1985, p. 5.

its own ethical rules and standards of practice for the museum itself and the museum profession.

"The governing body or other controlling authority of a museum has an ethical duty to maintain, and if possible enhance, all aspects of the museum, its collections and its services."¹ Above all, museums are responsible for all of the collections in their care, adequate storing, conservation and documentation. However, the institutional ethics are closely associated with the museum professionals ethics. Between the former and the latter, the serious controversy is mainly in regard to personal gains and losses regarding personal collecting through museum channels, dealing in collections through yellow markets, and conservation through personal laboratory. These all are quite sensitive matters.

On account of these problems, a meeting of ICOM experts to study the ethical rules governing museum acquisitions was held in Paris from 8th to 10th April 1970 under the auspices of ICOM Executive Council. This was the first time since ICOM was founded that a text has been drawn up on the subject. The Committee of Experts strongly affirmed the following principles, which it considered to be of fundamental importance for the whole museum profession: "Whatever the subject matter or discipline of the museum and wherever it may be situated in the world, certain principles of ethics and professional integrity in relation to acquisition can be presumed to be applicable. Briefly, this means that there must be a full, clear and satisfactory documentation in relation to the origin of any object to be acquired."² This is as important for an object generally classified in the category of art as for an object ethnography.

On the basis of these principles, the Committee of Experts adopted the following recommendations: "The museum of today is not mere repository of objects: it is concerned with the acquisition of the objects as an integral part of a specific programme of: (a) Scientific research³ (b) Education (c) Conservation (d) The demonstration of National and International,

1. ICOM, *ICOM Statute / Code of Professional Ethics*, Paris, ICOM, 1990, p. 24.

2. ICOM, "Ethics of Acquisition", *Meeting of Experts to Study the Ethical Rules Governing Museum Acquisitions* (Proceedings of the Committee of Experts, Paris, April, 8-10, 1970), Paris, ICOM, 1970, p. 49.

3. The word scientific is intended in its widest sense and is taken to include history of art.

Natural and Cultural Heritage." ¹ In this connection, the interrelation between performing specific programmes and constitution of the museum profession should be discussed here on the basis of the staff requirements of museums of India recommended by the Central Advisory Board of Museum (CABM) in 1956.

Table 3-1 Staff Requirements of Different Types of Museums

Types	National	State	Regional	Local
No. of Persons & Status	-	-	-	-
Scientific	Director 3	Director 2	Keeper 2	Keeper 2
Research	Dy Director	Curator	Dy Keeper	Dy Keeper
Education	Senior Guide. 3 Guide Lecturer Gallery Assit.	Guide Lecturer 2 Gallery Assit.	Guide Lecturer 2 Gallery Assit.	Guide Lecturer 2 Gallery Assit.
Conservation	Chemist 2 Chemical Assit.	Chemist 2 Chemical Assit.	1 Chemical Assit.	1 Chemical Assit.
Demonstration & Cultural Heritage	Senior Artist Senior Modeller 5 Modeller Draftman Photographer	Artist 4 Modeller Draftman Photographer	Artist 2 Photographer	1 Artist cum Photographer

Source : The Central Advisory Board of Museums' Recommendations, 1956.

It goes without saying that various specific programmes are organized by the museum profession. Considering interrelation between the staff requirement and the different types of museums in India. Smaller museums require less number of conservators and technical staff. It is said that the interrelation between exercise of specific programmes and constitution of the museum profession reflects the activities and functions of the museum. According to the above recommendation, most of museums in India are concerned more about scientific research and education than conservation and demonstration.

Furthermore, the Saputara Museum also deals with its collections which are directly or indirectly concerned more with

1. op cit., ICOM, 1970, p. 49.

scientific research and education than conservation and demonstration. However, at present, the actual working staff of the Saputara Museum consists of an Assistant Curator, a Gallery Assistant, a Clerk and three Security Guards. The Museum performs mainly a small exhibition work, educational programmes, and demonstration.

Some ethnographic museums may carry on all aspects of the above-mentioned museum activities, whilst other may specialize in certain parts of them. Consequently no object should be acquired which has no role to play in the aims of the museum as demonstrated by its programme. In this connection, Indira Gandhi Rashtriya Manav Sangrahalaya at the national museum level may cover all aspects of museum activities. On the other hand, the Tribal Museum of the TRTI, Gujarat, Ahmedabad is concerned more about scientific research and education than conservation and demonstration. Therefore, according to the aims of institution, composition of human resources, and collections of the materials are very much different.

"The object being considered for acquisition may come from anywhere within a wide spectrum of definitions the two extremes of which may be briefly summarized as being: a) objects recognised by scholarship and/or the community where they have their full cultural significance as having a unique quality and are therefore beyond value; b) objects which, though not necessarily rare in themselves, nevertheless have a value which derives from their cultural and natural environment".¹ In case of the Saputara Museum, the Museum has acquired a total number of 647 objects including Dangi ethnographical materials (60 objects) and archaeological artefacts (115 artefacts) at the standard on 30th May, 1992. Among the collections of the Saputara Museum, Accession No S.M. 322 (89) Side Scraper which was explored and recognised by a local archaeologist D.B. Chitale is applicable to the statement of "objects recognised by scholarship and/or the community where they have their full cultural significance as having a unique quality and are therefore beyond value". The other Accession No. S.M. 457 *mali* (fishing trap) is also applicable to the above-statement.

The significance of the cultural and/or scientific object may depend upon its being fully documented. As a matter of principle, no acquisition should be made without full documentation, with the possible exception of certain objects whose identity is not easy to establish without an extensive integration. The essential documentation of such objects may be obtained by systematic research after acquisition.

1. *ibid.*, p. 50.

B. Professionals' Ethics

In all activities, the professional museum workers must comply fully with the *ICOM Code of Professional Ethics* and the relevant national or regional Codes or policy statements on Museum Ethics. And furthermore, the Director and other professional staff should urge the governing body to comply with the above-mentioned Museum Ethics. The professional museum workers are conductor of museum work as well as mediators between the museums and the concerned community or between the members of museum profession and the members of the concerned community. Thus the museum professional should understand two guiding principles: "first, that museums are the object of a public trust whose value to the community is in direct proportion to the quality of service rendered; and, secondly, that intellectual ability and professional knowledge are not, in themselves, sufficient, but must be inspired by a high standard of ethical conduct."¹

In connection with "private interests", the *ICOM Code of Professional Ethics* makes a significant statement: "in the eyes of the public no private business or professional interest of a member of the museum profession can be wholly separated from that of the professional's institution or other official affiliation, despite disclaimers, that may be offered. Any museum-related activity by the individual may reflect on the institution or be attributed to it."² Thus the museum professional should be concerned not only with the true personal motivations and interests, but also with the way in which such actions might be construed by the outside observer. Hence, museum workers must not accept any gift, favour, loan or other dispensations or things of value may be offered to them in connection with their duties for the museum.

So far as "private collections" are concerned, "In some countries and many individual museums, members of the museum profession are not permitted to have private collections of any kind, and such rules must be respected." In my opinion, it is very sensitive matter regarding the professionals' hobbies and interests but the museum professionals must comply fully with the *ICOM Code of Professional Ethics* and the relevant national or regional Codes or policy statements on Museum Ethics.

1. op cit., ICOM, 1990, p. 30.

2. ibid., p. 31.

All museum workers are responsible for museum security and serving their best to the visitors. Of course, a museum may have a particular specialized staff for security but the responsibility should be shared by all staff. So far as museum collections are concerned, the museum professionals should take responsibility for acquisitions of museum materials. They have to adequately care of museum collections. In case of conservators or restorers¹, they must scientifically conserve the existing and newly-acquired materials and further they have to adequately show concern for care and restoration of museum collections. They must properly document all existing and newly-acquiring collections with the relevant information.

The above statements on Museum Ethics are essential guiding principles for the governing body of museum as well as the museum professionals. According to each museum situation, the special requirements should be supplemented by the Committee of Museum Experts under the auspices of the governing body of museum.

III. 7. Acquisition Methods for Ethnographic Materials

A. Field-Collection

Fieldwork is required not only in anthropology but also other subjects like museology and museography. Many museum workers carry out fieldwork for the purpose of the collection, preservation and research in their areas of specialization. In particular ethnographic museums deal with the vast scope of cultural material in comparison with other specialized museums.

In case of ethnographic museums there are three different types of museum situations like an exclusively indoor museum or an open-air museum, and a museum which combines these two. According to the museum work, the museum professionals should be equipped with sufficient knowledge and experience to carry out their duty. If a museum worker who is working at a composite ethnographic museum carries out fieldwork for the purpose of ethnographic collection, then he should be acquainted with ethnographical knowledge about the concerned community. Otherwise at least, the man has to study the concerned area and people. After entering the field the museum worker should collect something for the museum activities and functions and bring the field-data or documents about the collections. As far as

1. ICOM, "The Conservator-Restorer: A Definition of the Profession", *ICOM News*, Vol. 39, No. 1, 1986, p.p. 5-6.

possible\ such a person should be a trained museum professional, or a trained ethnographer or, at least, a trained museum worker with orientation in ethnography. An ethnographer who has no practical experience in the ethnographic museum work should be oriented in museology or museography. Unless he has museological training or related orientation, he may not carry out field-collection properly because his main interest is not collecting objects but collecting data and theoretical ethnography.

Ethnographic museums need specialists in ethnography as earlier mentioned. The field-collectors who are not museum professionals or ethnographers may create various problems because they are not aware of their responsibilities in the matter of "professional ethics" and they do not imagine future uses of museum resources. Many museum workers who are working at the indoor ethnographic museums are not acquainted with¹ field situation and ethnographers provisionally appointed by the museum are not equipped with the indoor museum and its activities. A common museum curator is more interested in particular objects which are mainly art and crafts or antiquities along with documents but a museum ethnographer is interested in collecting "a set of cultural materials" with complete data. In this case there are some differences in connection with field-collection undertaken by a common museum staff and a museum ethnographer. So far as the requisite ethnographic materials are concerned, what is selected by the common museum curator is generally out of cultural context or has incomplete cultural context. But the ethnographic museum has to collect and present the total cultural context or matrix. Therefore, a museum ethnographer attempts to collect "a set of cultural materials" with the relevant information for the various kinds of museum works.

In case of different types of ethnographic museums, most of indoor museum curators know very well how to handle and care ethnographic materials in the show-cases or in storage but only a few of them know natural deterioration of ethnographic materials in the open-air site. Conversely, most ethnographers know very well natural deterioration of ethnographic materials in the open-air site, but perhaps, only a few of them have some knowledge about scientific conservation.

Many indoor ethnographic museums in India have displays which are mainly "objects-oriented". Still, most of ethnographic museums in India present only conception or idea with objects while well developed open-air museums exhibit their collections in authentic atmosphere, viz., in the actual cultural context or matrix. Thus field-collector has to collect an ethnographic material with the relevant information regarding surrounding cultural context or matrix.

According to the capacity of human resources, financial support and period of fieldwork, the size and quality of collection differ from museum to museum. In any case, if the field-collectors prepare perfectly for the preliminary fieldwork which includes arrangement of field-equipment, analysis of primary information, a detailed field-programme, the list of requisite data and objects (See, Appendix, 2-2), questionnaire, the field-data cards, field-notes, field inventory cards, labels, envelopes and packs for collections, etc., they will be successfully carried out in the field.

Objectives behind the fieldwork for the ethnographic museum can be divided into two categories. One is for only acquiring ethnographic objects with description, the other is for collecting data for the future museum work mainly for research. A detailed documentation of the collections will be very useful for the existing and future collections of ethnography. However, many field-collectors of ethnographic museums in India and in many developing countries neglect to collect ethnographic materials with the requisite information. Many ethnographic materials associated with various ways of life such as religious or magico-religious ceremonies. Isolated material which is out of socio-cultural context will be infructuous and meaningless. Ethnographic objects which have no description are useless for scientific museum work. Therefore, the field-collectors have to describe the collections in detail.

Considering the selection of ethnographic materials, one example in connection with future collection may be given here. In the villages Bhadarpada and Chankhal, I observed a cubic tinned-iron drum known as *daba* which is originally an empty oil can, which was used as the requisite musical instrument in *thakrya* dance on the day of occasion or festival like *Tera* (June-July) in monsoon (See, Fg. 45-1 & 45-2, Vol. II). In view of a common field-collector, it is not at all interesting. But in view of a museum ethnographer, it is important in cultural significance because the Dangi enjoy playing it as a percussion musical instrument on the day of festival. Yet, out of the Dangi socio-cultural context, it has no special significance. The reason is that the material is only a useless empty oil can in terms of aesthetic and economic appraisal. But so far as cultural materials are concerned, the ethnographic museum workers must take into account this kind of material for the future museum collection. It is a fact that the ethnographic museum has many functions out of which one is to collect the past and the present ethnographic materials. At present this cubic tinned-iron drum is one of the Dangi cultural materials. In the near future it will become a rare musical instrument of the Dangi tribal communities due to industrialization. It is valid to collect it because it reflects the present Dangi cultural life and material culture. After many years, if the photography

which I took a picture of the *daba* is seen by future generations, they may doubt whether the Dangi really played this kind of musical instrument. However, they may find out the evidence of the material in this thesis because no ethnographic museums in India has collected this kind of cultural materials.

Regarding procedures of field-collection, the common practice will be described here. I collected ethnographic data regarding *mala* which was recorded in my field-collection list. It is a crab trap which was made of bamboo clips by a Konkana at Borkhet near Ahwa (See, Pg. 34-5 & 34-6; Vol. II). Of course, a common museum field-collector may collect it in the field. I collected this material through fieldwork, which includes the procedure of identification, measurement, describing, drawing, taking slide film, taking colour negative film, shooting 8 mm video tape by a handy video camera and interview with the owner about the concerned object.

Generally, the ethnographic museum workers frequently go for fieldwork for the purpose of collecting data and/or the requisite materials. Most of field workers are acquainted with their territories. But they may sometimes go to a new site to collect ethnographic collections. Even though they go for the first time, they should have a good knowledge about the field as well as the ethnographic material which they are likely to collect. And they have to build rapport with the inhabitants. All museum work including field-collection requires normal approach without tricks. In the field they should be diligent, honest, kind, and may express their thanks to the informants or the owners of the collections. Before finishing field-collection in the field, they must check their collections. Then only they may move to another field. When they move to another field they must take away the collections, which must be properly packed and tagged the pack or wooden crate. On returning from the field, they must properly clean the collections and spray them with insecticide. In case required, they have to repack for transportation. These procedures of care, handling and transportation of the acquired collections depend on conditions of the collections and field situation. After finishing one day's work before going to bed they must completely record the acquired collections on the field-note. On returning from the field, they must report their arrival to the Director of the museum and also must hand over all collections to the museum. They must give the required suggestions caution with documents for handling and accessioning the collections to the technical staff and the Registrar when they hand over the collection to the museum. The relevant official documents must be kept in the museum. Then they may send their thanks letter to the person who kindly cooperated with their field-collection.

B. Purchases

There is a general option that ethnographic material which is purchased will be less preferable to that which is the result of scientific fieldwork. A comprehensive collections of a particular cultural materials like food, ceremony, decoration will be problematic and time consuming. But if purchasing is arranged as complementary to fieldwork perhaps better results are possibly expected.

The Indira Gandhi Rashtriya Manav Sangrahalaya (IGRMS), Bhopal makes purchases of ethnographical materials on extensive scale. It is required because of their emphasis on salvage operation. The institution was expected to make very comprehensive collection of ethnographical materials from all over India. The co-operation of the Anthropological Survey of India was taken for granted but for some reason, that was not forthcoming to the extent to which it was expected. Consequently, the authorities were under some pressure to find alternative ways of securing collections before several galleries were organised to translate the story of man in India as approved by the specialists. Perhaps there was a dilemma before the authorities in the matter of collection on all-India basis. The limited staff could not be deputed to distant areas. Therefore, it was decided to approach those persons and institutions who already had experience of collection of ethnographical materials or are willing to undertake the same in their respective areas. This was considered as a part of the salvage operation meaning to get material wherever it was available in situ before it faces risk of decay and neglect. Therefore, the IGRMS entered into some agreements with some reputed centres or agencies side by side, special expeditions or efforts were made to distant areas. It could acquire fine ethnographical materials representing traditional heritage of Kerala through salvage operation. Even though staff of the IGRMS surveyed all parts of Kerala, they might have made purchases of such Kerala boats to form good meaningful sequences and to facilitate thematic presentation.

When the term "purchase" is used, it normally refers to a monetary transaction. A specific sum is offered for acquiring certain object is called "purchase". Most of the ethnographic field-collection are made by purchase. For example, all 39 Dangi ethnographic objects acquired by the IGRMS in 1987 were by means of purchase. Most of tribal ethnographic materials are not expensive compared to art objects. Among the Dangi ethnographic objects, costlier items were of wooden masks of which the most expensive mask namely *Agiya Elandi* was only 450 rupees. Most of the Dangi things were not costly and each item on average was less than 30 rupees in 1987.

It is, therefore, recommended that while formulating policies for ethnographic collections, the above-mentioned methods are applicable to purchase-collection. In this connection, I may recall salvage operation organized by the Korean Folk Village Museum in 1989. The salvage area was being under construction of a small multipurpose dam which was located in Hapcheon area in South Central part of Korea. Due to the dam construction, about 17 villages were to be displaced. The inhabitants had to emigrate to other places. Therefore the Korean Folk Village Museum organized the field-collection programme for the salvage operation. The villagers were going to emigrate to nearer or farther places. It was clear that most of villagers might need to sell out their used materials, in particular, useless items in view of a new settlement in other place. Fortunately the field-collectors of Museum could acquire various cultural materials from house to house.

The Museum collected various kinds of traditional items through the field-collection including purchase, exploration and accepting gift. The successful field-collection was : Firstly, the Museum was ready for buying the requisite traditional items which proposed emigrants wanted to sell out. Secondly, the Museum was ready for accepting gifts which they wanted to donate to the Museum. Thirdly, the Museum was ready for bartering daily items with the traditional materials. The Museum could collect as much as possible the thrown items by the emigrants which were useful for the museum presentation. This kind approach can be said one of the ethnographic exploration. All these four methods were practically used in the course of salvage operation. In this connection the term "purchase" is not meant a commercial transaction for profit but it is meant one of means to collect and preserve the vanishing and deteriorating ethnographic materials by the museum.

The ethnographic materials that the Museum collected from the field were valued less expensive than the Museum had purchased similar things from the urban antiquarian shops or art and crafts dealers. But most of things were acquired in salvage operation are less than medium quality in terms of collection appraisal, but the prices of those are reasonable or cheaper than the antiquarian shop. Generally, purchase in salvage operation makes a saving money for the museum. The museum also can help the owners who want to sell out their traditional items to the markets to make money for a new settlement. However, purchase in salvage operation contains some problems comparing to normal field-collection such as a limited choice of the materials, uneasy documentation, spreading money-mind among the members of the communities in connection with traditional items.

C. Loans and Exchanges

The most significant loan is the permanent loan which museums can get of important material. The rationale behind permanent loan is primarily to prevent transfer of material given to the loanee. Generally, objects received on permanent loan cannot be disposed. Hence the loanee museum must be concerned with the objects which should be scientifically managed and preserved by the museum professionals. On the other hand, a permanent loan is a very useful method of acquiring valuable and unique material, particularly, judicious use of this source. A permanent loan is a permanent commitment so far as conservation, display and security are concerned.

Ethnographic materials can be acquired by way of permanent loans. For example the material which is in the possession of one museum in a state may be given on loan to another museum if it is found relevant to its specialization. Yet they are assorted or miscellaneous in character because they were not scientifically collected. Such objects make less meaningful displays perhaps those can be given on permanent loan to the museums where they can be shown along with the related material. This is an instance of inter-museum cooperation. If the loanee museum can offer something in exchange, the transaction is not of loan but of exchange. Ideally such miscellaneous objects should be put together to serve as a basis for travelling exhibition which may visit village to village or museum to museum by turn.

The temporary loan is an important method of collecting. The museum of ethnography may borrow material even from craftsmen particularly "Master Craftsmen" to install special thematic exhibitions. Such loans can be obtained by museums for the purpose of special or temporary exhibits or demonstrations.

The loan or exchange of cultural programme became very popular in India during the last decade. It was a part of the National Policy of the Government of India to have exchange with other friendly countries for better cultural dissemination. In particular, the West Zone Cultural Centre has developed Yatra as cultural odyssey, i.e., exchanges of cultural programmes among the member states of the West Zone (See, Map 1-4). Besides exhibitions there were other activities based on demonstrations of ethnic crafts and other skills in performing arts, etc. very comprehensive attempts were made to acquire ethnographic collections and to get the services of tribal artists for the festivals. A number of good publications on such festivals have been published by professional photographers and the concerned researchers. The photo documentation and video documentation of tribal ethnography is a welcome achievement in India.

D. Gifts

An outstanding example of a gift of ethnographical collections is of Mr. Kora to the Government Museum, Madras. Here was a person who had very keen interest in folk arts of Tamilnadu. He went on collecting various ethnographic materials which could have been the envy of any museum, Mr. Kora wanted to set up his own museum. But that did not materialize. He, therefore, finally decided to give the whole collections as a gift to the Government Museum, Madras, because it has a good ethnographic section. Mr. Kora wanted that his lifelong efforts should not be wasted. He was in search of a place where proper care could be taken. Not only that but also proper utilization of the materials could be ensured which in the case of the Government Museum, Madras, was a certainty. That museum is a pioneer in the field of ethnographic education both inside and outside. In particular, its school services are justly famous. Also there is stress on teachers Mr. Kora was fully justified in selecting that museum as the destination for his unique collections.

Another example is that of N.A. Toothi a famous social scientist who was connected with the Bombay University. During the course of his fieldwork he collected more than 400 bronze images which represented all kinds of folk beliefs and icon styles. They were gifted to the Charotar Education Trust, Vallabh Vidyanagar, Gujarat. Hence Dr. Toothi's gift may be considered as a good example of how scholarly fieldwork contributes to ethnographic museum collections. This is in the long tradition of scholars using material culture evidences for their own investigation before finally leaving them into the custody of museums.

Another glorious example is that of Mr. Heeramanek's gift of pre-Columbian materials. The National Museum, New Delhi, received his collections as the gift from the Latin America. Mr. Heeramanek who was of India origin and settled in the U.S.A. dealt in arts and crafts and amassed a large number of cultural materials. The Los Angeles County Museum, U.S.A., the Asia Gallery acquired some of the finest pieces from Mr. Heeramanek collections. The National Museum, New Delhi, also reciprocated the gesture and created a special Gallery for his gift of pre-Columbian materials.

It is said that gift is an important method of acquisition. To get as many of collections as possible the museum has to make special efforts. The museum may identify who has such significant collections it may keep good contacts with the collectors, and furthermore, it may do everything possible to cooperate in taking care of the concerned collections. If

possible, a special loan exhibitions with a special catalogue of such private collections may be organized. Elaborate opening ceremony is organized widest possible publicity in the press and through mass media ought to be given to the generosity of the collector who kindly gave an opportunity to the public to show his collections. Such concern and gratitude may eventually lead to gift or bequest of the collection from the owner. Although gifts from the rich and powerful citizens are welcome the museum professionals and museum authority also should explore the possibility of gifts from the lay-public.

It is noteworthy that a Dangi gifted a stone image to the Saputara Museum in January 1977. It was identified as Narshinh Avtar in Sukhasan mudra in 6-7th century A.D.¹ When a Dangi was doing cultivation in the Government Nursery Garden near Ambapada, the stone image was found by him. Then the image was handed over to the Saputara Museum. The stone image of Narshinh Avtar with other collections are exhibited in a show-case of the Saputara Museum.

III. 8. Handling, Storing and Transportation of Collections

A. Handling and Preventive Care

(1) Handling

It is now well-known fact that as far as possible, museum workers should avoid to handle the proteinaceous materials², metallic objects, lacquered, painted and varnished objects without wearing gloves because of unintentional vandalism. Many ethnographic materials as mentioned above are easily deteriorated by human fingers of which sweat contains various kinds of minute chemical components like acid or alkali, dust, oil, salt, etc. Besides, human fingers can leave permanent impression on the surface of the sensitive ethnographical objects such as lacquered, painted and varnished items. Particularly, acids in finger-marks can cause long-term rusting or tarnishing on the surface of metallic objects. Therefore, whenever museum workers handle sensitive museum objects they must wear either white cotton gloves, disposable plastic gloves or surgical rubber gloves according to the nature and types of museum objects. It is said that gloves can help to protect ethnographic materials

1. Note: Chitale, D.B. (1978) identified the stone image as Narshinh Avtar, 5th C. A.D,

2. Proteinaceous materials include hair, fur, skin, etc.

from unintentional vandalism and deterioration¹ by human fingers.

It is important that museum workers scientifically identify the nature and types of museum objects for the museum work. In terms of conservation science, all museum materials can be divisible into three categories (See, Appendix 3-2 Classification of Museum Materials): One is inorganic materials which consist of metal, stone, glass and pottery. The other is organic materials which are of plant and animal origin. Another is composite materials like paintings and embroidery work, which is mixed inorganic with organic materials and vice versa. Most of ethnographic materials, especially, things of daily use are composite materials. It is an undeniable fact that a well-developed agricultural tribal community possesses much more composite materials than undeveloped food-gathering or food-collecting tribal communities.

Generally, most of the organic materials are much more sensitive to surrounding conditions than inorganic materials. Whatever their origin, those can be affected by adverse conditions, and something which are inorganic can deteriorate very fast under improper care and conditions.² Before collecting ethnographic materials, especially, every organic and composite materials should be carefully checked by the field-collector for insect or mould infestation, because the materials can introduce insects to the other collections. Once if insect infestation spreads on the ethnographic materials, to eradicate it is not easy. Especially, objects made of wood should be carefully checked for insect infestation before the objects are placed in the storage or packed in a crate. If necessary, the objects should be sprayed with insecticide in the temporary storage in the field, and further, if possible, they should be fumigated in the field laboratory. Of course, on entering the museum the deteriorated materials should be sent to the conservation laboratory.

In the tropical and sub-tropical areas, organic materials, especially, leaf, bark, cane, vegetable fibre, reed, gourd, hair, fur, hide, leather, feather, bone, antler, ivory, etc. should be carefully handled by the field-collectors and dealt with

1. "By 'deterioration' is meant the natural and accidental 'ageing' of a material, and its inevitable effect upon the appearance and structure of museum objects.", cited in Coremans, Paul, "The Museum Laboratory", *The Organization of Museums: Practical Advice*, Paris, UNESCO, 1960, p. 97.

2. Daifuku, H., "Collections: Their Care and Storage", *The Organization of Museums: Practical Advice*, Paris, UNESCO, 1960, p. 121.

intensive care because all these materials are quite sensitive in high temperature and humidity extremes. Moreover, in the field some of them have not been touched for a long time, there are greater possibilities of their deteriorating unintentionally. Thus, a field-collector has to check in the state of preservation of the objects periodically. An object has to be carefully observed before he shifts or moves it. While a museum professional is checking the object, he must hold it properly at the centre of gravity so that it will not fall out of his hands. The main portion of the object is usually one structure to which other parts are attached. It is necessary to lift safely the object, after supporting other heavy parts.

(2) Preventive Care

For the preventive care of objects, H. Daifuku (1960) suggested that "optimum temperatures are between 20°C and 26.7°C with approximately 50% relative humidity"¹(RH)². O.P. Agrawal (1979) also recommends the following optimum condition for tropical countries, the relative humidity 55% and temperature 20°C.³ In practice, it is not easier to maintain the optimum condition at fixed point. Therefore, the fluctuations may considerably be narrowed and maintained in between 20°C and 25°C with approximately between 55% and 60% relative humidity.⁴ Considering the inter-relationship between the Dangi ethnographic materials and climate of the Dangs, in my opinion, the Daifuku's suggestion (1960) is more persuasive and practical than Agrawal's recommendation because of peculiar climate of the Dangs⁵.

1. *ibid.*, p. 121.

2. The Relative Humidity (RH) is a ratio as given below:

$$\% \text{ RH} = \frac{\text{Amount of moisture actually present in the air in unit volume of air}}{\text{Amount of moisture required to saturate the same volume of air at the same temperature}}$$

3. Agrawal, O.P., *Care and Preservation of Museum Objects*, Lucknow, The National Laboratory for Conservation of Cultural Property, 1979., cited in Das, A.K., 1989, p. 81.

4. *ibid.*

5. In the Dangs, daily maximum temperature is 40°C and minimum 26°C in May, the hottest month, and the relative humidity in summer in the afternoon is less than 30% and in monsoon the maximum relative humidity is over 70%, therefore, Daifuku's suggestion (1960) is more persuasive and practical.

In fact, the level of temperatures recommended is in between 18°C and 25°C which is usually governed by the comfort of people where the exhibits are on display.¹ But in the stores or in collections that are not usually open to the public, the temperature may be allowed to fall to a lower level. Sometimes even the recommended level of 55% relative humidity for mixed collections may be too high, especially, during the winter season in cold country. But, for metal collections in arid region, between 45% and 50% relative humidity is an acceptable level.² On the contrary, for paintings on wood, mats, nets, basketry, wooden carving the relative humidity should be maintained between 50% and 55%, textile, between 40% and 50%, lacquered objects, bone, ivory, antler and horn about 55%. Regarding the relative humidity for fur, feather, hair and skin, K.B. Priestman (1986) pointed out that "Humidity is hazardous to skin and leather because dryness will cause embrittlement (blight) and a relative humidity of above 65 per cent will result in the growth of moulds, especially where the ambient air is stagnant".³ Daifuku (1960) also reported that if the relative humidity increases over 70% there is a danger of mould growth.⁴

According to nature and components of the ethnographic material, a specific preventive care is required. Wooden furniture should be waxed periodically. Mats, nets and basketry may be brushed with a solution of beeswax and turpentine or sprayed with polyethylene plastic before being kept in the storage. Clothing can be padded with tissue paper to prevent creasing or hung from padded hangers and covered with plastic bags. Smaller objects can be kept in plastic bags with para-dichloro-benzene crystals. In order to take successful preventive care, it is necessary both to recognize and understand the hazards represented by environmental factors. It is certain that the natural and accidental 'ageing' of a material is caused by the multiple agencies of deterioration which may act individually or in combination.

1. Staniforth, Sarah, "Environmental Conservation", in Thompson, J.M.A., et al.(eds.), *Manual of Curatorship: A Guide to Museum Practice* (2nd), London, Butterworths, 1986, p. 192.

2. *ibid.*

3. Priestman, K.B., "Conservation and Storage: Ethnographical Material", in Thompson, J.M.A., et al.(eds.), *Manual of Curatorship: A Guide to Museum Practice* (2nd), London, Butterworths, 1986, p. 303.

4. *op cit.*, Daifuku, H., 1960, p. 121.

In practice, the deterioration of cultural property is because of the following factors¹; 1) Natural factors: a) Light (Infra-Red rays and Ultra-Violet rays), b) Dust and dirt, c) Atmospheric conditions (Humidity and Temperature), 2) Chemical factors: a) Defective materials, b) Atmospheric pollutions (Sulphur dioxide, Carbon dioxide, Nitrogen dioxide, Ozone, Hydrogen Sulphide, Smoke, Soot, Sulphur), 3) Biological factors: a) Animals, b) Plants, c) Micro-organisms, 4) Mechanical factors: a) Human Vandalism (Theft, Destruction, etc.), b) Neglect (i) Accident, Fire, Flood, (ii) Unfavourable Storage, Packing, Mishandling, etc. Especially, "bio-deterioration has become the number one problem in the ethnographic museums"². The detailed factors of bio-deterioration are as follows: a) Animals (Silver-fish, Book-lice, Moths, Cockroach, Woodborer, Termites, Bats, Rats, Birds, etc.), b) Plants (Fungi, Lichens, Mosses, etc.), c) Micro-organisms (Bacteria).³

So far as deterioration of ethnographic materials are concerned, there are many harmful insects which create various kinds of problems. In the tropical area, the ethnographic objects made of hair, fur, skin and feather have been deteriorated by the buffalo-carpet beetle (dumotidae). Wooden carvings and bamboo crafts are easily attacked by the power-post beetle.⁴ The destructive insects, like wood-borers and termites are very dangerous in terms of conservation science. The silver-fish and book-lice are prevalent in the collections of paper-masks, drawing on paper, and other paper work. Besides, moths and cockroaches are prevalent in various organic materials. During the monsoon, the relative humidity sometimes rises above 70% in the Dangs. Hence, bio-deterioration of ethnographic materials can easily occur in the Saputara Museum in the monsoon.

However, the acquired ethnographic materials from the field should be properly kept in good condition of a temporary storage which should be fully protected from the incoming moisture. For storing of ethnographic materials, it is necessary to measure the relative humidity and the temperature by means of the dry and

1. Source: The Conservation Laboratory, Department of Museology, Faculty of Fine Arts, The M.S. University of Baroda, 1993., and op cit., Staniforth, Sarah, 1986, p. 199.

2. op cit., Das, A.K., 1989, p. 77.

3. Source: The Conservation Laboratory, Department of Museology, Faculty of Fine Arts, The M.S. University of Baroda, 1993.

4. See, op cit., Das, A.K., 1989, p. 85.

wet bulb thermometer and hygrometer. Nowadays, an automatic thermo-hygrometer is available in market, therefore, it will be very useful for measuring the relative humidity.

A ventilation window and dehumidifier facilities like electric drier, fan and/or heater should be installed in a temporary storage area. Furthermore, for dehumidification by silica-gel and dehydrated calcium-chloride can be used in the temporary storage, cabinets or cupboards. In this connection, "It is recommended that 20kg of silica-gel are used per cubic metre of exhibition-case.¹ A.K. Das (1989) gives an example of the use of silica-gel, i.e., "National Archives of India", New Delhi, has successfully used 750gms. of silica-gel for a space measuring 100cm. x 40cm. during the rainy season and brought down the RH from 95% to 70% within a period of one hour."²

Light is a cause of deterioration of the material and fading of colour. The rate of deterioration caused by light is proportional to both the light level and the period for which the material is exposed. The human eye is sensitive to the visible range (400-700 nm) and perceives this part of electromagnetic spectrums as violet at the short-wavelength end changing through the spectral colours blue, green, yellow, orange, to red at the long-wavelength end.³ Among invisible rays, Infra-Red (IR) ray extends from the end of the visible spectrum to longer-wavelength: it may cause heating problems. However, Ultra-Violet (UV) ray is to the short-wavelength side of visible light: it is a matter of great concern in respect of conservation. Besides, invisible rays include x-ray, gamma ray, etc. On the other hand, electromagnetic radiation is energy and if it is absorbed by a material it may cause photochemical reaction. From the viewpoint of conservation science, it is certain that short-wavelength radiation like UV is more damaging than long-wavelength radiation like IR. Under the circumstances in ethnographic museums, approximately as much photochemical damage is caused by the UV as by the visible light.

Among inorganic materials like metal, stone, glass, ceramics are merely deteriorated by UV radiation. However, by UV and visible rays, dyes, pigments are easily affected, and cellulose materials such as paper, cotton, and linen, and proteinaceous materials such as wool, leather, feathers are discoloured and weakened. Especially, the natural pigments of fur, hair, feathers are readily damaged by light, and low intensity

1. op cit., Staniforth, Sarah, 1986, p. 200.

2. op cit., Das, A.K., 1989, p. 82.

3. op cit., Staniforth, Sarah, 1986, p. 192.

illumination, maximum 50 lux free of UV emission may appear safe. Basketry, fibre, wood, ivory, antler, horn and shell should be kept with a light level not exceeding 150 lux. In case of dyed textile or painted specimens, the level of illumination must be reduced to a minimum of 50 lux with appropriate UV filtration. Thus, as far as possible these materials should have limited exposure to light.

In order to minimize the impact of light the following methods are recommended: (i) use of UV ray absorbing filters which should be checked every six months because of the reduction of the efficiency of the UV filter, (ii) Curtailing the length of exposure and adjusting the strength of illumination, (iii) Using both indirect natural light (within a reasonable range of 200 lux controlled by photo-cell sensor with motorized blind) and artificial light with good colour rendering properties, especially, a combined "polyphosphor"¹ or "Phillips Fluorescent" lamps or a warm fluorescent tube and tungsten bulb. Particularly, in the case of artificial light, tungsten bulb and be illuminated at 50 lux because they appear brighter.² warm fluorescent lamps³ are suitable for exhibits to be illuminated at 50 lux because they appear brighter.⁴ A Cool-White Deluxe Fluorescent records higher colour temperature, 4,300°K, rate of

1. "Polyphosphor lamp is more efficient than some fluorescent lamps, which can cause considerable distortion and should not be used.", cited in Staniforth, Sarha, 1986, p. 194.

2. op cit., Staniforth, Sarah, 1986, p. 194.

3. For the purpose of minimizing the impact of the Ultra-Violet radiation, Das, A.K. (1989 : 83) recommended the use of cool artificial light (such as fluorescent tubes), but many scientists such as Stollow, Nathan (1966 : 306), Staniforth, Sarha (1986 : 194) and McAusland, Jane (1986 : 246) recommended the use of Incandescent lamps and warm fluorescent tubes rather than cool fluorescent tubes. References ; Stollow, Nathan, "The Action of Environment on Museum Objects", *Curator*, Vol. 9, No. 4, the American Museum of Natural History, 1966, p. 306., MacAusland, Jane, "Conservation and Storage : Prints, Drawing and Water-Colours", in Thompson, J.M.A., et al. (eds.), *Manual of Curatorship ; A Guide to Museum Practice* (2nd), London, Butterworths, 1986, p. 246.

4. ibid.

Damage per Footcandle¹, 0.554 D/fc than a Warm-White Deluxe Fluorescent, 2,900°K, 0.444° D/fc, and a Incandescent Lamp, 2,854°K, 0.138 D/fc.² However, in the context of Indian museums, V.P. Dwivedi (1973) suggested that "So far best combination is tungsten lamps combined with light blue fluorescent lamps".³ But it is now out of date as mentioned above. In the case of spot-light type of bulb, it should be installed at a sufficient distance from the specimen to avoid local intensification of light and heat.

Furthermore, in and around industrial area and roadside, atmospheric pollution can easily affect the museum objects. The most suitable method for reduction of the impact of air pollution is air-conditioning. In the absence of air-conditioning facilities it is recommended to keep the proposed objects in air-tight show-case or chamber to avoid permeation of the pollutant air. Needless to say that proper circulation of clean and fresh air, and furthermore, emission of pollutant air are very important. Therefore, not only a storage but also exhibits areas, exhaust with motorized iron-blind (being controlled by an electronic sensor or a manual one) and inlet fans with automatic closing system (being controlled by an electronic sensor or a manual one) should be installed on the ceiling and/or on the upper and lower parts of the walls.

In case of air-conditioning, its successful operation depends on a competent maintenance and scientific monitoring by the conservator or curatorial staff. In some museums of Asia, the responsibility of maintenance and control of the air-conditioner is placed in the hands of administrative staff. But this is not a correct way. The responsibility of that should be shifted from the administrative staff to the conservator or curatorial staff. In practice, operating an air-conditioner demands for much more money than two electric coolers or four electric fans. The following suggestions for the air-conditioning facilities are recommendable:

(i) Optimum Temperature : Summer $22 \pm 1^{\circ} \text{C}$, Winter $19 \pm 1^{\circ} \text{C}$,

1. Note: 1 footcandle means 1 lumen incident per square foot. 1 footcandle is approximately equivalent with 10.76 lux. 1 lux means 1 lumen incident per square metre. 1 lux is approximately equal to 0.0929 footcandle.

2. op cit., Stolow, Nathan, 1966, p. 309.

3. Dwivedi, V.P., "Care and Security of Museum Objects", in Baxi, S.J. and Dwivedi, V.P., *Modern Museum: Organisation and Practice in India*, New Delhi, Abhinav Publications, 1973, p. 126.

(ii) Relative Humidity : $55 \pm 5\%$, iii) The particulate filtered to an efficiency of 85% to Eurovent 4/5¹, iv) Sulphur dioxide and nitrogen dioxide filtered to reduce the concentration below 10 Mg/m³, v) Air-filters should be checked periodically (as far as possible use "Viscos" filter rather than "Absolute" filter), and vi) These requirements to be met 24 hours a day, every day of the year.²

In my opinion, even a small museum should install air-conditioning facilities for the special purpose areas such as a special exhibition room, auditorium, audio-visual booth, computer section and/or special storages such as a visible storage for the public and a sensitive object storage for hair, fur, feather, leather, leaf, fibre, cane, etc. Of course, as much as possible within its financial support, the museum may select either the central control air-conditioning system or the sectional one. The sectional air-conditioning system has some benefits such as saving management expenses and easy controlling each sectional air-conditioning according to the nature and types of ethnographic materials. In any case the museum should install the automatic closing door system. The sectional air-conditioning facilities are cheaper than the central one if the museum installs only a few air-conditioner which has a low-capacity. Therefore, the sectional air-conditioning system is recommended for the smaller museums.

B. Storing

The subject of storage is vital in every aspect of museum work because it concerns with safe keeping of valuable objects. Storing ethnographic materials in a museum requires careful consideration at every point of time of what is being collected and what is already acquired. Normally, storing of ethnographic collections begins as soon as objects come into legal possession of the museum. But even before, acquired ethnographic materials enter the museum, they are sometimes required to be kept in the temporary storage in the field.

Storage should be considered as part of security and scientific conservation and preservation of ethnographic materials. The storage should be structurally sound, dry and clean. It should be possible to restrict access, and the storage should not be used as a thorough fare. Also, it should be protected from extreme heat, excessive coldness and moisture.

1. Note: Eurovent 4/5 is a new standard for testing air filters being adopted by all Europe manufacturers.

2. op cit., Staniforth, Sarah, 1986, p. 199.

In this connection, Elizabeth Pye (1986) suggested that "in the standard store the temperature should never be outside the range 4-30°C and should lie preferably between 10°C and 25°C with no more than a daily movement $\pm 5^{\circ}\text{C}$ ".¹ In case of the sensitive store, "The temperature should be between 15°C and 25°C with a gradual daily movement of only $\pm 5^{\circ}\text{C}$ ".² Furthermore, it should be located away from heating facilities and sources of vibration.

So far as the museum security is concerned, theft, fire, and flood should be avoided. For this purpose, the museum storage should be installed with burglar-proof lock and burglar-alarm, fire-proof measures and fire-fighting instruments such as halogen gas extinguishers and carbon dioxide, and further, flood-alarm, emergency water-pump and auto-self operating generator (if in the basement). In case of a big museum storage, CCD camera, lifts, passages and doors should be of reasonable size and situated so that trolleys, large containers, fork-lifter, crane jib and small truck can be moved in and out easily. And further, the storage should have an emergency door at backside.

On the contrary, storing in situ and in transit are also very important issues for ethnographic museums. In case of field-expedition, field-collectors can acquire various kind of materials that they intend to collect from the field. After acquiring these collections, the field-collectors should classify them according to their classification system. The five different categories of ethnographic materials are recommended based on difficulty of conservation, handling, storing, packing and transportation: (i) Fragile materials (pottery, terracotta, glass, gourd, etc.), (ii) Highly sensitive materials (painted object, embroidery work, proteinaceous materials like hair, fur, skin, etc.), (iii) Easily manageable materials (various tools, synthetic textile, small-size metallic and wooden utensils, etc.) (iv) Heavy materials (grinding stone, memorial stone, statue, bullock-cart, etc.), (v) Small and valuable materials (jewelry, ornament, sacred object, etc.) and (vi) composite and structural materials (hut, shrine, temple, etc.)³. Besides, according to subject-wise, area/community-wise, date or

1. Pye, Elizabeth, "Conservation and Storage: Archaeological Material", in Thompson, J.M.A., et al. (eds.), *Manual of Curatorship: A Guide to Museum Practice* (2nd), London, Butterworths, 1986, p. 212.

2. *ibid.*

3. The classification of ethnographic materials is based on the author's personal experience in the Korean Folk Village Museum. Earlier, A.K. Das (1989: 56) already suggested a similar classification of ethnographic materials.

period-wise, the acquired ethnographic materials can be classified, and further the classified materials should be separately kept in the different stores as far as possible.

As earlier-mentioned, before storing the acquired materials in the temporary storage, spraying insecticides such as naphthaline and para-dichloro-benzene in a liquid form and spraying D.D.T. powder on the floor of the storage should be done. In this connection O.P. Agrawal (1979) suggested that 1% mercuric chloride solution in water for spraying and use in the backside of the cup-boards and other inaccessible places.¹ From case to case, the adequate first hand treatment is necessary for preventing museum materials from various kinds of agencies of deterioration which may act individually or in combination. In case of a museum which no air-conditioning facilities are installed, the museum necessarily has to spray insecticides to repel pests and fungicides to stop the growth of fungus. For the purpose of these, toxic chemicals in either liquid or gaseous form, are very effective.

The most well-known micro-organism is the fungus of which several species are held responsible for destruction of the ethnographic materials, of which, "dry-rot" and "staining fungus" have been identified and studied so far². Against the infection of fungus, thymol fumes act as an efficient deterrent. This can be used safely for the sensitive coloured materials like dyed textile, painted specimen, paper work, etc. The storage or show-case can be fumigated by spraying a 10% solution of thymol in alcohol and by keeping the cabinet or chamber closed for 24 hours so that the thymol vapour does not escape.

In case of the infestation of the insects, the well-known and most effective fumigant is the carbon-tetra-chloride mixed with carbon-di-sulphide. But carbon-di-sulphide is efficient for the objects without any colour coating or painting on the surface. Normally colour coated or painted objects should be fumigated with the formaldehyde solution which is less volatile. Therefore, it requires active fumigation through heating by a 100 watt incandescent lamp inside the fumigation chamber. After fumigating the ethnographic objects made of wood, bamboo, cane, reed, vegetative fibre, they should be applied with a solution of refined creosote oil.

Particularly, mildew stains on silk or woolen textiles, they can be removed by bleaching the fabric after dropping a few drops of hydrogen-peroxide or potassium-permanganate.

1. op cit., Agrawal, O.P., 1979.

2. op cit., Das. A.K., 1989, p. 87.

In any case, all acquired objects should be kept in safe storage according to the nature and types of ethnographic materials. Obviously field-collectors cannot go on carrying away all acquired materials individually. Until they shift all collections to the museum, acquired materials should be kept in a temporary storage in the field. Of course the valuable things should be kept separately or should be deposited in the local security authority or commercial safe storage.

When objects are brought into a museum for approval, they have to remain in physical custody of the museum authority till the deal is finalized. Especially when purchases are to be made from outsiders, things are brought to the museum premises according to the convenience of the giver. Usually it takes many days, if not weeks, before decisions are taken about the price to be paid. Sometimes the prices are negotiable and sometimes the museum authorities have to carry out certain procedures. But, beyond a certain limit a curator or Director may not be empowered to make purchases. In this case he has to refer the matter to the concerned authority like "Purchase Committee". He may also like to consult local experts before deciding the worth of the object. Until the final decision is taken, the material offered to the museum is in its physical custody and it is the institutional responsibility to take care of it.

The matter of the safety and security of such material is an example of the responsibility of a museum towards storing even before accessioning. Storing of such materials should be differentiated from the permanent storage so that unaccessioned objects do not get mixed up with what museum owns permanently. The same consideration holds good for material received on temporary loan for the purpose of exhibitions. Sometimes objects which were not identified may enter the museum for the purpose of their identification or evaluation. It is also one of the responsibilities of the museum to offer such services and to take care of those objects. Care and preservation of the collections are the responsibilities of museum professionals. A slipshod storage system shows that museums do not care for heritage in practice even though they may claim great concern in their policies. Actions speak louder than words is true of museum concern for cultural materials. There are reports about great variety of ethnographic collections made by some premier institutions in India. After sending qualified anthropologists for fieldwork lasting months and seasons, the priceless cultural materials remained uncared and became victim of insect attack. Then one wonders if cultural materials inside museums can be properly protected by museum professionals or should they be left uncollected.

For the efficient storing of ethnographic materials, from the time of designing a storage, the nature, shape and size of

the ethnographic materials should be considered. In practice, the designing of storage depends on the system of typological classification of the ethnographic materials. It is quite difficult to classify the ethnographic materials which differ from each other in shape, size, weight, nature, value of the materials. In the context of ethnographic museums in India, it is believed that A.K. Das' '25 specific-categories' can provide a basis for the storage-categories for ethnographic materials in India (See, Appendix 3-1). According to the museum situations, '25 specific categories' for the storage can be modified and supplemented by the five different categories of ethnographic materials in terms of conservation science.

On the other hand, mostly storing place of Indian museums are located in the basement which was considered as the most suitable place in the past. But nowadays most of the museum architects recommend storing places on the ground floor or on the upper floors of the museum building because of environmental factors. In practice, the ground floor is a good place for heavy and bulkier objects. However, under circumstances of Indian museums, either the first floor or the second floor has many advantage in protecting against radiant heat, moisture and unexpected floods.

The storage of ethnographic museums need various furnishings and different mode of storing system. It may be furnished with either wooden or metallic cabinets, chests, chambers, cupboards, drawers, boxes, racks, shelves, hangers, ladders, stools, tables, trolleys, etc. according to the nature and types of ethnographic materials. Within the limits of financial support, the best quality of seasoned and treated wood, stainless white metal or hard aluminum metal should be used for making these furniture. As far as possible, shelves should have flexibility in order to adjust to the shapes and sizes of the objects in collections.

It is practical that the multi-purpose storage for ethnographic materials may form two parts in a hall ; one part, as an open-hall with high ceiling may occupy 2/3 area of the total space while the other part extends to two stories which may occupy 1/3 area of the total space and the upstairs of the latter may be climbed up from the main hall by a slope-stairs or ladder. In case of a small storage, the upstairs may be called an attic for storing "easily fragile materials" and "sensitive materials" such as porous pottery, terracotta, paper work, manuscript, vegetative fibre, cane, hair, fur, feather and skin.

After arranging the museum storage and storing museum materials, the following work should be done by the curatorial staff concerned:

- (i) All the storage cabinets should be classified and numbered

according to the categories. (ii) List of the collections stored in each cabinet should indicate the contents and position of each objects. (iii) A copy of the list of collections should be displayed on the door-panel of the respective cabinet. (iv) The index card of the individual object should bear the cabinet number and the location of the object in the shelf. (v) The respective index card should occupy the exact location of the object in the cabinet when it is removed for exhibition or restoration. The movement of the collection should be recorded and indicated in the index card.¹ In practice, it is important in terms of good collections management that a museum establishes and manages the storage registers along with gallery registers because mainly these two registers help in the control and management of incoming and outgoing operations.

C. Packing and Transportation

(1) Packing

Packing is very important in terms of museum work as well as transport. From the field, after a field-collector acquired a particular material and inspected physically, he should pack the material for transport to the museum. Of course, according to the duration of the fieldwork, he may keep the collection in the temporary storage in the field itself or he may directly transport it to the museum. In any case, packing ethnographic materials from the field requires special attention because pre-preparation for packing material is necessary. All packing materials should be ready before entering the field. The following packing materials are required : polystyrene boxes or polythene boxes, self-sealing bags, foamed polyethylene plastic sheet, acid free tissue paper, spun bonded polyethylene label, rust-free nails and staples, polypropylene string, silica-gel, relative humidity indicator cards, biocides, insecticides, and other stationery for recording².

Pre-fieldwork preparation for packing is not easy. A field-collector should complete the preparation work before entering the field. Otherwise, from the field all substitute packing materials should be supplied by the field-collector. In rural areas, the available substitute packing materials are wooden boxes, paper-boxes, grain bags, mats, cloth, hay, straw, fibre-cord, straw-rope, etc. But these materials are mostly very weak in terms of mechanical and bio-chemical deterioration, therefore, these disposable packing materials should be used judiciously because of self-deterioration problems.

1. *ibid.*, p. 58.

2. See, *op cit.*, Pye, Elizabeth, 1986, p.p. 237-238.

Indeed the general rules on the Packing and Handling of Objects have been already prepared by a Committee of the American Association of Museums, and technical information on Containers also has been supplied by *Modern Export Packing* published by the United States Department of Commerce.¹ Besides, many articles have dealt with packing and transportation.

In practical aspect, packing cases fulfill mainly two functions ; one is for protecting their contents from mechanical damage, vibration and shock, and the other is for providing a stable environment around the materials. Similarly, for the good packing ethnographic materials, the following basic rules should be followed: (i) a strong, closed, waterproof standard container must be provided, (ii) the objects packed within the container must be protected against any damage, vibration and shock. Techniques of packing within the containers vary for each type of ethnographic materials and which must be approved by the curators or conservators, and in some museum by the Registrar. In any case, "Although there may be standard procedures for packing certain types of material, it is often necessary to devise special methods for individual pieces."²

For the good packing museum materials, the following suggestions are made: Packing cases should be closed wooden boxes as far as possible. Use of the open crates must be prohibited for shipping purpose. The exterior of the case should be reinforced by cleats and riding battens. Interior measurements should be 10-15cm. larger than packaged contents to provide space for resilient padding. Cases should be lined with waterproof paper or formed polyethylene plastic sheet, tacked or stapled down, and with overlaps sealed into place with gummed tape. Separation battens should be used when more than one object is packaged in a case. These battens provide interior reinforcement and a partial floor or wall for the different objects so that they cannot move when the case is transported. Wooden cases may be coated with paraffin to prevent moisture escaping when humidity changes take place. Cement coated nails should be used to provide a greater resistance to withdrawal from wood except in respect of the case cover which must be screwed. Normal cases should not be heavier than what one man can lift

1. Osborn, E.C. (revised by Morely, G.L.M.), "Travelling Exhibition" *Temporary and Travelling Exhibition*, Du"sseldorf, Germany, UNESCO, 1963, p. 80.

2. Dudley, D.H., "Packing and Shipping Collections", in Dudley, D.H., et al. (eds.), *Museum Registration Methods*, Washington, D.C., The American Association of Museums, 1958, p. 81.

alone. As far as possible, heavy and light objects should not be combined together in same case. If they should be packed together, use cross slats to divide the case into compartments.

So far as padding and wrapping are concerned, the packaged object should float inside the case. This is to prevent the transmission of vibration or shock from the outside case to the packaged objects. Padding should be 10-15cm. thick between the objects and the wall of the case and packed tightly enough to prevent settling toward one corner of the case. All padding material should be wrapped and sealed in self-contained units in plastic. The padding material must be resilient. Except in emergency packing work, straw and sawdust should be prohibited to use as padding material. Within the limits of financial support and situation of packing, artificial foam made of cellulose, plastic or rubber is effectively used for padding. All fragile surfaces, such as lacquer, varnish, paint, etc. should be protected against contact with any loose padding material and paper wrapped pads. Therefore, recently many museums use wrapping material such as foamed polyethylene plastic sheet or air-formed plastic paper and acid free tissue paper. After wrapping the objects, the label should be affixed on the surface of each bundle.

All shipping cases should be clearly marked in stenciled or printed letter at least 5 cm. high in black indelible ink to assure careful handling and to indicate shipping destinations. If possible, the caution words and symbol should be marked outside of the case in red colour. Formerly, the caution words like "Fragile", "Handle with Care", "Under Roof", etc. were prevalent. But nowadays, world-wide, the caution symbols like fragile, necessary waterproof, necessary correct position, etc. are widely recognized to all who are handling the packing cases. Therefore, many ethnographic museums preferably use the caution symbols for better handling and transportation of museum materials.

(2) Transportation

Before transporting ethnographic materials from the field, all materials should be preventively cared by the field-collectors. Usually from the field, field-collectors hardly follow the general rule of packing but at least, they should follow general sound rules of handling and transporting ethnographic materials.

Generally, packing specifications, documentary requirements and rates are published by the transportation agencies which may accept a special order like ethnographic museum materials or fine arts museum materials. According to the condition of a museum such as financial support, transportation facilities and human resource, the mode of transportation can be determined by the Curator or Registrar. In my opinion, the best transportation

for the museum materials is conducted by the museum professionals with specialized transportation cars. The next good way of transportation is conducted by a specialized transportation agency rather than general transportation agencies.

So far as the transportation facilities are concerned, railway, jeep, truck, trailer, helicopter, airplane, ship, and others such as human or animal carrying, cart or lorry transport, and parcel post are available. According to the duration and distance of transport, size and weight of the loading materials, and nature and value of the objects, the transportation facilities should be determined by the museum professionals. The popular and safe transportation facility is a railway, but the problem of that is not easy accessible for loading directly the ethnographic materials from the field in which sometimes no railway station is available. Besides, the rail transportation usually requires more than one transfer from the field to the museum. On the other hand, the road transportation has no such problems. As mostly known-areas can be approached by a small jeep or big trailer, even without any transfer, the required materials can be directly transported from the field to the museum storage.

In practice, the sizes and weight of the loading materials are very important because sometimes a single truck cannot transport a heavy and huge object. In this case, a specialized transportation car and a group of trained loaders are necessary. Such object should be loaded in the trailer by a crane or fork-lift. Big boxes or containers also should be loaded by a crane or fork-lift or a group of trained loaders. Therefore, for packing and transporting the concerned objects from the field to the museum storage or gallery a group of trained packers and loaders are necessary.

Appendix 3-1 25 Specific-Categories of
Ethnographic Materials

Basic category	SI. No.	Specific category	Code No.
01	1	Food-gathering	(01.1)
	2	Hunting	(01.2)
	3	Fishing	(01.3)
	4	Plant cultivation.	(01.4)
	5	Domestication of animals	(01.5)
02	1	Sheltering	(02.1)
03	1	Fire-making	(03.1)
	2	Common technologies	(03.2)
	3	Tools and Mechanism	(03.3)
04	1	Ginning, spinning, weaving	(04.1)
	2	Apparels and wares	(04.2)
	3	Ornamentation	(04.3)
	4	Mutilation, tattooing, Hair dressing	(04.4)
05	1	Weaponry	(05.1)
06	1	Transport and conveyance	(06.1)
07	1	Barter and exchange	(07.1)
	2	Weights and measures	(07.2)
08	1	Birth and mortuary rites	(08.1)
	2	Ceremonies and festivals	(08.2)
	3	Votive and sacrificial	(08.3)
	4	Charm and magic	(08.4)
09	1	Non-performing arts	(09.1)
	2	Performing arts	(09.2)
10	1	Drinks and narcotics	(10.1)
	2	Games and amusements	(10.2)

Source: op cit., A.K., Das, 1989, p. 48.

Appendix 3-2 Classification of Museum Materials

Classification of Museum Materials

(i) Inorganic Materials

Metal		Stone		Glass	Pottery	
Unalloyed Alloy		Igneous	Metamorphic	Sedimentary	Porus	Non-Porus
Gold	Pewter	Granite	Marble	Quartzite	Unglazed Pottery	Porcelain
Silver	Bronze			Sandstone	Terracotta	Glazed Pottery
Iron	Brass			Limestone		Stoneware
Zinc	Electrum					
Copper						
Lead						
Tin						

(ii) Organic Materials

(iii) Composite Materials

Animal Origin		Plant Origin	
Hide		Wood	Painting
Leather		Bark	Embroidery Work
Parchment		Leaf	
Vellum		Bamboo	
Feather		Straw	
Hair		Fibre	
Fur		Cane	
Wool		Cotton	
Silk		Gourd	
Bone		Seed	
Ivory			
Antler			
Horn			
Shell			

Source: The Conservation Laboratory, Department of Museology, Faculty of Fine Arts, The M.S. University of Baroda, and op cit., Das, A.K., 1989, p. 114.