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21st PD/99-01

Repositioning of bamboo crafts
in Chandrapur district



Repositioning of bamboo crafts
in Chandrapur district

→ Special project by
Ajay Tiple
99613009

Guide
Prof. A.G Rao

Submitted in the partial fulfillment of the requirements for the degree of

Master of Design
in Product Design

Industrial Design Center
Indian Institute of Technology
Bombay
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Approval Sheet

The special project entitled "Repositioning of bamboo crafts in Chandrapur district" by Ajay Tiple is approved for the partial fulfillment of the requirement of post graduate degree in Industrial Design.

Guide..... *A. G. Rao* (A. G. Rao).

Chairperson.....

Internal Examiner.....

Acknowledgement

The study was made possible with the constant guidance and support of Prof. A G Rao.

I would like to thank the people I met for the case studies ,the hospitality they provided and the experiences they shared were very helpful.

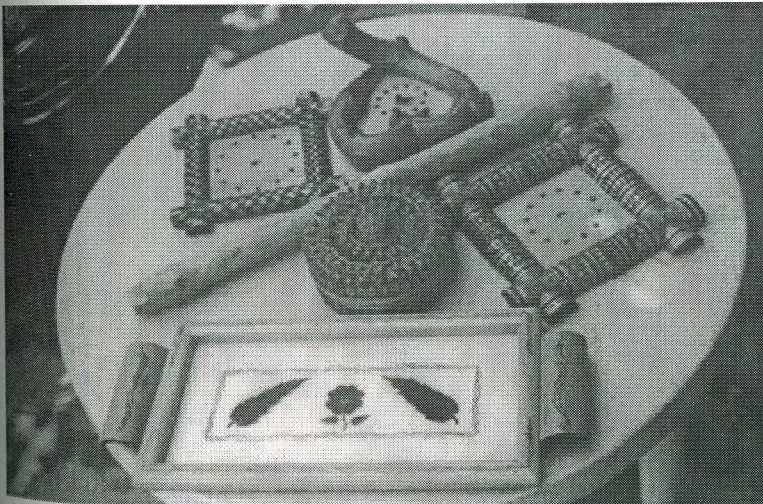
I would also like to thank Mr pradyumn Kaul (management consultant and policy analyst, IIM Cal.)for his valuable suggestions , Director handicrafts, Fort, Mumbai for providing me the Compendium of handicraft schemes, Mr. Vikas Jain, GM ,DIC, Chandrapur for the possible help.

I would like to thank Mr. Bino Paul ,Deaptrment of Humanities and Social Sciences, IIT Mumbai for his comments on the Kerala model.

1. Introduction to the project

Chandrapur has many craft traditions in its interior villages. Bamboo craft is a prominent craft among them. Chandrapur has a lot of crafts activities in the field of bamboo and all these are basically taking place in the interior parts like villages . The products that are made are craft items in addition to few utility items . The native craftsmen inspite of original skills get poor economic returns.

The project basically deals with all these issues assessing the current situation in terms of the products ,markets ,production , marketing e.t.c. and looking at the possibilities of repositioning the craft which can fetch better economic returns to the crafts persons.A basic model is proposed and compared with other such cases in Kerala and Thailand . Finally an attempt is made to propose a model which will work in such a situation.



2. Scope of the project

The project becomes valuable for someone who is thinking of doing something towards the bamboo crafts development in Chandrapur. The project gives analysis of the present situation in Chandrapur and also in other places like this where bamboo craft development is going on. Then it does the problem identification at the various stages and supplies the possible solutions to them.

The report also provides the necessary contact addresses of people who would be helpful at certain stage. It also gives inputs regarding the design and marketing repositioning and the factors which affect them and ways to deal with them.

Contents

		Page no.
	Acknowledgement	4
1	Introduction to the project	5
2	Scope of the project	6
3	About Chandrapur	8
4	Case studies	10
4.1	Existing Chandrapur model	17
4.2	Loop holes / problems at each stage	18
4.3	Repositioning	20
5	Kerala model	21
5.1	Thailand model	23
5.2	Proposed model	24
5.3	Positioning strategies	25
6	Market repositioning	26
6.1	Design repositioning	27
6.2	Design strategies	29
6.3	Conclusions and recommendations	31
7	Useful addresses	32
8	Bibilography	33
9	Appendix	34

3. About Chandrapur

Chandrapur is a district situated at the border of Maharashtra and Andhra Pradesh. It is very hot during summers like Nagpur which is 3hrs journey from Chandrapur.

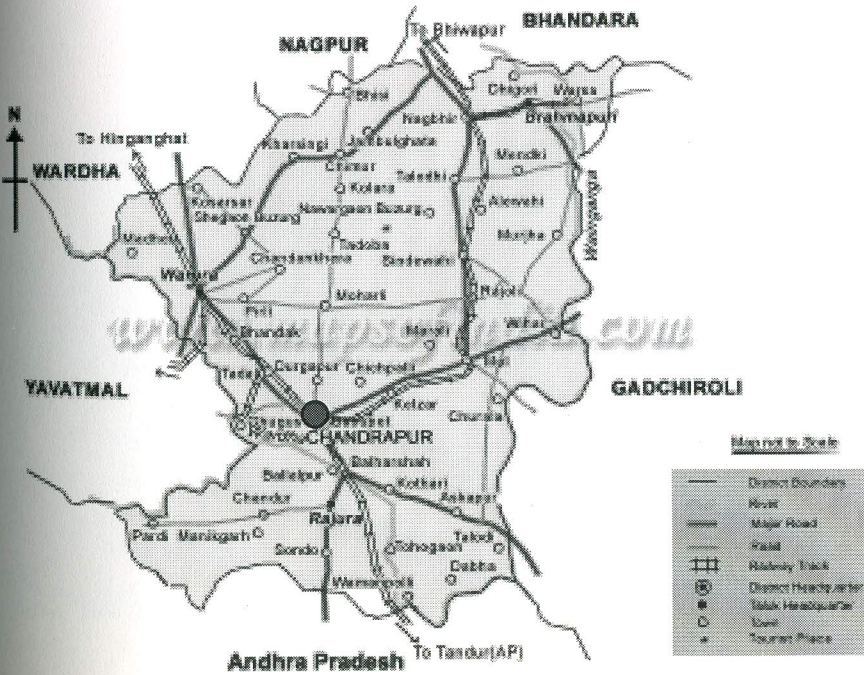
Chandrapur is not a very big city but has almost all the facilities that a city has. It has a big thermal power station (NTPC), Ordinance factory, Ballarpur paper mill e.t.c. around its periphery.

The people in here are helpful and kind hearted, the language they speak is Marathi but Hindi is also well accepted here.

District map of Maharashtra



Chandrapur (Maharashtra)



The economy of the area is basically based on mineral coal, timbers, tendu leaves and other forest products.

Population	3.75 Lacs
Geographical area	10,490 sq.km
Normal rainfall	1,398 mm
Taluka	10
literacey	59.41 %
Commercial banks	142
Registered small scale units	1,524
Nearest airport	Sonegaon (Nagpur), 140 kms

No. of bamboo workers	65 (chandrapur district)
No. of bamboo workers	135(gadchroli district)

3.1 Case studies :

Few case studies were undertaken to know the actual scene of bamboo craft, the workers, their problems e.t.c. in the interiors as well as in city. Emphasis was laid on to the main problem rather than getting caught in the secondary problems. The outcome of the case studies are tabulated in the table below which gives an opportunity to compare these cases.

The workers include tribals as well as few people from the city, but they are seasonal workers so craft work is done when there is no work in the fields. Still there are a few exceptional families where some work in the fields and others do the craft work.

Case 1

Mr. Vasudev Chandrabhan Janabandhu (3rd standard). Village Junona, Chandrapur; Age 50+ (His 7 sons are also working in addition to farming) .Good reputation in the village because of this and all the villagers know them . He lives in a village inside forest so he gets bamboo whenever it is needed without permission from forest department.

Chattrasheel : Matric fail
Mahadev : 10th pass
Arvind : 7th pass (main person)

Problems:

- Cannot buy bamboo as it is auctioned by forest deptt. for Rs . 5,000 - 10,000/- which they can't pay. participants from other states are rich so they can buy.
- People from forest department seize bamboo from their houses but don't take designed ones.
- Door to door selling as there is no direct market
- They lack in awareness, boldness.

Costs:-

- Simple design stick Rs.5/-.
- Nicely designed stick 30 Rs. which they sell in govt. offices and other such places.
- City clients take designed sticks from these people for Rs.15/ per piece and sell it at around Rs.100/- in Mumbai.
- 1 stick is done in 1 day & if it is an order then 4 sticks can be done in a day.



Case 2

Vijay hazare

Govt. Diploma in Arts from Aurangabad.

Specialization - portrait painting.

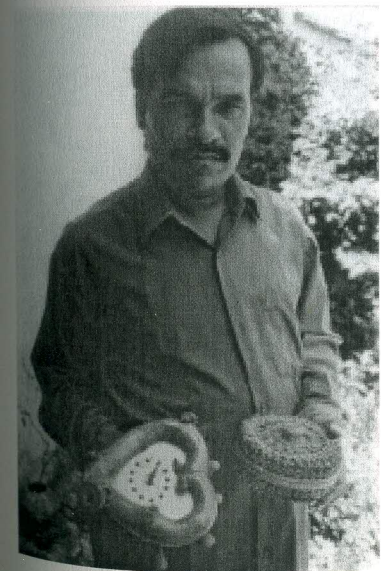
Started 6 years back Met people to know about bamboo.

Customers - Goa, Delhi, Bombay

Apply Melamine /Touchwood for protection from weather.

1 Bamboo costs him - Rs. 12 - 14/-

- Has 4 workers
- Own design
- (Katang is a big diameter bamboo)
- Black charcoal used for colouring bamboo. Cutting bamboo when the moon is reducing in size does not allow Termite problem to occur. (as per old people)Himself goes to forest to get naturally shaped bamboo, like one shown in the leftmost figure. These are then used for different customised products



Tribal Lion



Bamboo palace

Case 3

Chandra Sakharam Pungathi (40)
Anandwan employee (cook). Baba Amte brought him in.
Bamboo is his side business for last 12 years.

1 bamboo costs - Rs.20/- to him.

His son B A Cmmorce says he will go for a job but still continue bamboo work. He has started 6 months Bamboo hastakala prashikshan for last 2 yrs for youngsters. Take some fees (60/- admn. 50/- monthly) from the 10 students that come from Warora i.e. same place.

- Want support from Maharashtra Sashan

- Economic problems

 - Didnt got loan (fincial assistance) for certain competitions of brass work

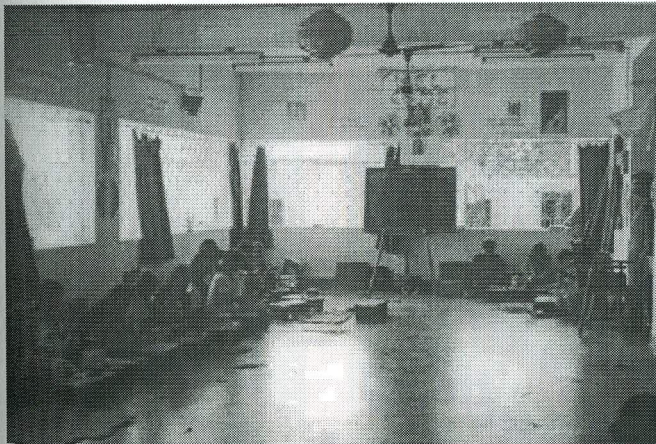
His well wisher friends (from abroad too) bring good customers
Stood 1st out of 36 in 1982 Pune, Exhibition of bamboo crafts.
Baba Amte presented a ship made by him to delegates of Switzerland.

Indo Rama ordered 20 foot gate in bamboo. Rs. 2 lakhs project cost. No credit went to him whereas the idea was his.

Designer lamp



Bamboo products inside glass bottles



Trainning programme in progress

Case 4

Anand Nirakar (Project Officer Chandrapur)

Bamboo Hastakala dyanpeeth

H.O. Nagpur.(RAVINAFDE Arch./designer)

VEDHA - Institute of Village Enterprises Development for handicrafts articles.

Bamboo cost - 14 - 15 Rs.

Chandrapur bamboo is hard (Soft Kolhapuri bamboo is used).

This institute offers a 6 months training for 8th pass students & 18-35 age. Government gives stipend of Rs.700/- per month for 30 people Institute gives stipend of Rs.300/- per month for 70 people. Children are taught ways of making bamboo crafts. Proper training is given along with notes to write by the student for future reference .

Scope: Student can start his/her individual profession.

Total kit provides by org. is owned by student after completion of training.

Students also got practical book/notes.

No extra money is given to students if they produce a new design.

Exam - Twice in 6 months

Lathe is also provided by the organization Polyurethane paint is used for painting.

Their demand : Govt. should provide a show room where students' bio-data & their work can be displayed. This proposal has already been sent to govt.

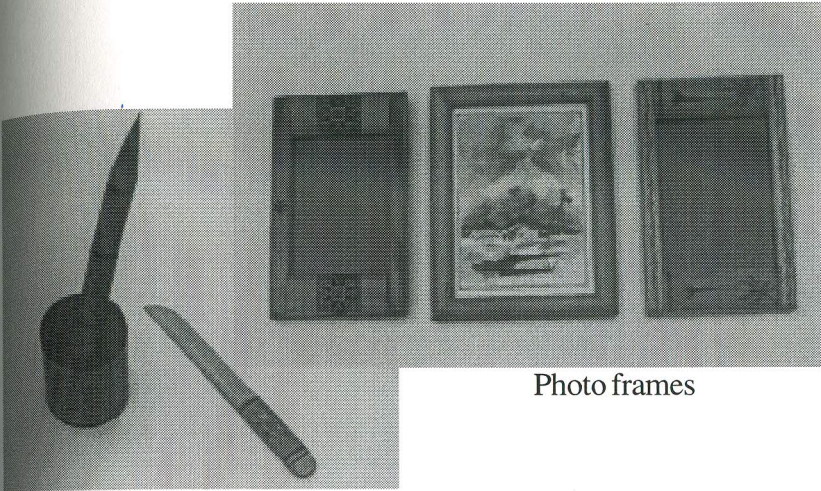
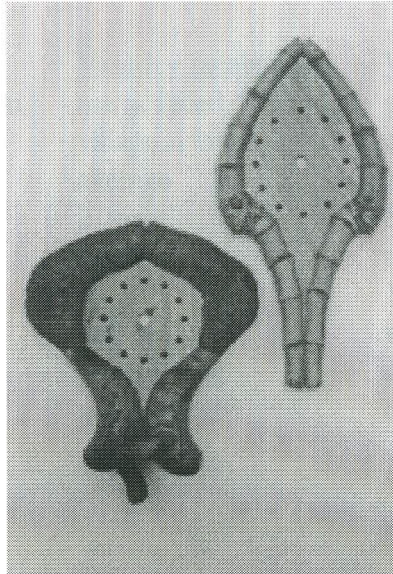


Photo frames



Wall clocks

Case 5

Mr. Manohar Sapre is in media (newspaper). He also does business of bamboo products. The products are generally made by the tribals or his men which are then supplied to his son in Mumbai. His son exports many of these bamboo products as well.

Mr. Sapre started using bamboo some 6-7 years back when teak was actually available. Interestingly he initially used teak timber waste/ scrap to make things thus utilizing waste at the same time. When teak become scarce Mr. Sapre switched on to the 2nd option, i.e. bamboo which is widely available in the forests here. The only problem is that forest department has the rights to sell bamboo. Still 90% of bamboo goes illegally or due to theft. He therefore buys bamboo from auctions.

The products range from 300 - 3,000.

“The idea of bamboo was borrowed from tribals. The tribals have an inborn instinct to do the work , they use whatever they get like natural rice etc. Bamboo being straight offers challenge to make products as no curves are possible, other than naturally curved bamboo. Hence this is not commercially viable.”

Products:- Frames
Treys
Clock (made of bamboo root)

Tabulation of case studies

<u>Name</u>	<u>Vasudev Janabandhu</u>	<u>Vijay hazare</u>	<u>Chandra Pungathi</u>	<u>Anand Nirakar</u>	<u>Manohar Sapre</u>
Educational qualification	matric failed	govt dip. in arts	----(cook)	8th pass	..dont know....
Residence	village in forest	city outskirts	ashramhouse	city
Social status	average	good	average	o k	very good
Started before	21yrs	6yrs	12yrs	2yrs	7yrs
Supply of bamboo	forest	market & forest	market	kolhapur	market
Cost	0	12	20	15
Production	self	workers	self	(training)	workers
Mode of selling	direct selling	direct selling	direct selling	indirect selling	indirect selling
Market location	govt. offices	clients from cities	referrals/orders	other cities	mumbai

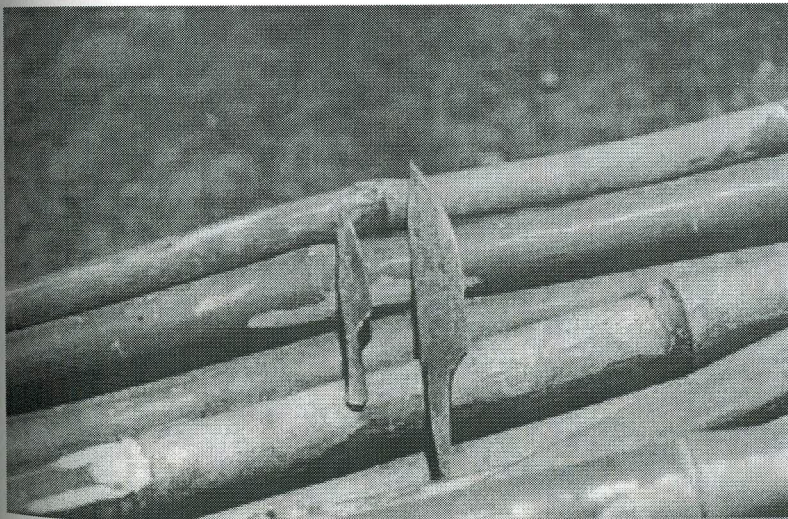
3.2 Existing Chandrapur model (in 6 stages) :

- 1 One or two families in a village make these products made of bamboo.
- 2 People from city come and buy these products from them or order them accordingly with certain modifications.
- 3 The villagers randomly price the products, some how the bargain is done and finally the city people will buy there products at a fairly low price.
- 4 These products are then taken by the city people to their places where the products are treated again for better finish.
- 5 Customers are found rarely in the same town but mostly in other cities where there are some loyal customers/clients.
- 6 The same products will be sold in these big cities or metros with a multiplication factor of 10-15.

These 6 stages are now analysed for the kind of problems they have at each stage on the next page.

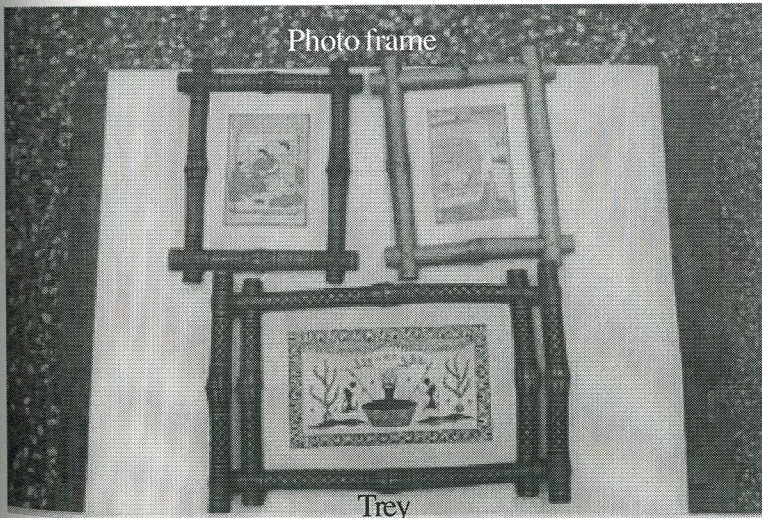
3.3 Loop holes / problems at each stage :

- 1 no regular/continuous production (as demand is not there)
problems in getting quality bamboo(buying in lots brings good and bad bamboo both)
few designs that are continued from ages(craftsmen rarely explore new designs)
few tools are used through the process (they develop tools by their own as per the requirements, which is quite rare. New tools can help the productivity and finish)
workers are from different villages i.e. in a village only 2-3 families are involved in bamboo work(as it is not seen as a prospective business)
no storage facility to keep the products(for irregular production they dont want to make a separate room)
- 2 the city clients give work depending on the order they have so that way villagers dont get a continuous order
the order completion date is decided by the city clients(villagers have to work accordingly)
craftsmen dont have appropriate tools(they dont know that better tools exist and they continue with existing tools)
- 3 no technique or process of pricing the products(they dont know)
no quality check at villagers end so poor quality and finish is achieved(quality checks will improve the quality and understanding of craftsmen)
there is no place for the craftsmen to sell their products(no such place exists)
concrete feed back is not given to craftsmen to improve next time



Common tool (katti)

- 4 products need 2nd treatment to make them salable in outside market (this is double work which can be erased by getting it done at first place)
product design intervention is needed (to make the products come up to a standard)
here also storage facility devoted for storing products is not there (products actually get dust after some time)
- 5 the basic business link to big cities or metros is missing (this link can create continuous demand)
there is no place in metros where these people can sell their products anytime (assurance that the products will sell)
- 6 there is no place in big cities where these products can be kept for a continuous exhibition cum sale, the location of such a place becomes important
the products need proper packaging and labelling to make them inviting and salable
branding becomes important as people always relate branded products to a good quality product.



4. Repositioning :

Repositioning means craftsmen getting correct return for his skills and knowledge. He can only achieve this by selling in urban markets. In rural market higher quality does not give proportional returns.

In a broad sense repositioning was taken as taking products from Chandrapur and finding ways so that these will be fit for market in a big city or a metro. Basically the products needs modification in terms of design , finish e.t.c. This all cannot be achieved in just one step as there are complex activities involved in the whole process so the process as a whole needs certain modification. So certain system level suggestions were proposed and then two products were selected for analysis purpose and design inputs were given for these two products. Basically the repositioning involves two aspects in this project one is the design repositioning and other is the market repositioning. In reality design repositioning is a part of market repositioning.

To understand the problems in the existing model some other models were studied that are more successful. The two models studied were Thai model and the Kerala model.

4.1 Kerala model :

Kerala has a well thought system for craftsmen as a whole bamboo organisation which at least solves the problem of survival of craftsmen in there. The Kerala State Bamboo Corporation is a public limited company owned by the government of Kerala. The **main objectives** of the corporation are :

- to develop and promote industries bamboo based on bamboo, reed and cane products.

- to undertake the manufacture and trading bamboo, reed, and cane products.

- to provide financial, technical, marketing and developmental assistance and also to give guidance to any establishment, undertaking or enterprise, of any description whatsoever, which is likely to facilitate or accelerate the development of cottage industries based on bamboo, reed and cane in the state of Kerala.

- to promote, establish and operate sales offices such as emporia, showrooms, publicity offices, stalls and centres with the objective of improving the marketing of bamboo, reed and cane anywhere within and outside the state.

Working of the corporation :

- collection and distribution of bamboo to societies and traditional workers, purchase of matts from workers and marketing them.

- cutting of bamboo is done by registered cutters and raw material is supplied to weavers for making products (which will be sold back to the corporation).

- corporation markets the products within and outside the state.

- supply incentive scheme to workers who produce more.

- credit facilities, housing loans, money at occasions like marriage, accident relief, financial relief for eye operations.

Co operative societies :

About 40 cooperatives societies are involved with a total strength of 5000 workers .State govt gives help to these societies as major part in share capital ,grants for purchase of land,bulding grants e.t.c.

The reality :

Although the Kerala model is one of its kinds and is successfully running as compared to the other such models in India there are certain drawbacks which are as follows.

the craftsmen overthere feel more secure than ever as now they get financial assistance from the government which inhibits them from producing quality work

the organisation lacks the business mindedness as there is no worry about profits. The reason being that even if there is loss at certain interval then govt. will appear to fill the losses,so the people over there never care about making profit e.t.c.

the market is not clearly (or say appropriately) defined ,the arts and crafts loving segment is still not taken care of

the craftsmen are just producing what will fetch them food at the end of day,they dont actually practise new things nor are encouraged to do so.

4.2 Thailand model :

A village consists of a set of entrepreneurs ,each entrepreneur employs 6-8 workers in broom making activities and 2-4 workers in bamboo furniture making.Nearly all the entrepreneurs have completed only primary school education and have an experience of 5-20 years in this business.This is a very good side business for them.The products are named aswell as the dimensions are also defined for the whole range.

The problems they face are low bamboo quality ,increasing price of bamboo,non durability of raw material and products,labour shortage during cultivating and harvesting seasons and low return.

4.3 Proposed model :

One entrepreneur /designer

10-12 workers/craftsmen under him

He gets special subsidy for the development of these people and thereby making profit for himself and the workers.

Govt. schemes for such entrepreneurs which will be offered only when he shows satisfactory results at regular intervals

The products made by them have a constant watch of the entrepreneur .
They have got good storage facility so better inventory options.

A business link in big cities in the form of another entrepreneur in a metro who gets these products to sell them. This entrepreneur gets products from all these entrepreneurs working in villages/ districts.

Entrepreneur in the metro places these products in a exclusive show room at a place where these items get the maximum value in terms of money. This entrepreneur also gets subsidy/relaxation from govt. to sell, popularise and exhibit bamboo products.

Proper feedback from entrepreneur in the metro to the entrepreneur in the village ,regarding design ,finish ,demand ,trends e.t.c.

5. Positioning strategies :

Among the various positioning strategies the following would be useful in this case :

based on product attributes	high price
usage occasions	corporate gift
against competitor	indian
product class	against gifts

(Positioning involves three steps :

1. Identify competitive advantage on which to build a position.
2. Selecting the right competitive advantage.
3. Effectively communicating and delivering the chosen position to the market.)

Position, these products can take :

high quality **Indian** craft items
designed in IDC IIT Mumbai (this would generate confidence among the buyers regarding the quality). This will also be useful where people/target customers give associations, great importance due to the social status and society they live in.

Communicating the position :

This will involve designing marketing mix. :

- Product -quality product
- Price -high price
- Place -through high quality shops
- Promotion -adv. in high quality media

Market segmentation :

upper middle class , upper class and corporate offices.

5.1 Market repositioning :

Set up required for the repositioned product will involve these issues :

Finance :

- Initial capital (govt. subsidies or schemes, pvt. investment)
- salaries and wages (to workers e.t.c.)
- contingency plans (money for bad times)
- Costing and profit margin of products

Infrastructure :

- Organisation location and scale (office)
- other buildings (work sheds e.t.c.)
- out let in metros (sale cum exhibition)
- storage (at both the ends i.e. manufacturers and sellers)

Technology :

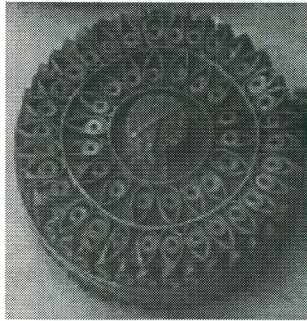
- new tools
- proper and timely communication with insiders and the world (internet)
- new designs (making what customer will buy)
- getting feed back (through web site, even selling through web)
- mass production (tools and processes)
- fusion of materials (bamboo + metal parts e.t.c.)

Training :

- training programmes for finish & new designs (utilizing govt. schemes)
- motivational training to craftsmen to encourage them to explore

Marketing :

- production (timely and to the standards)
- quality check (to access ourselves, to create a brand)
- brand image (through quality and brand promotion, advertising)
- understanding the customer (direct customer feed back by the salesperson)
- distribution channels (lesser the better. one wholesaler with his storage tank)
- transportation (with proper packaging and proper quantity at a time)



Product 1



5.2 Design repositioning :

Current status :

Purpose :- dry fruit container
looks over done ,too many repeated elements
fit between two parts is not smooth & perfect
individual strips not well finished,fibres come out

Suggsetions for Repositioning :-

reduced play of repetetive elements
other uses as table lamp e.t.c.
new materials(metal/plastic ring) at the rim e.t.c

Product detailing becomes crucial. Tools and jigs can help in achieving a clean joint. To achieve exact detail sizes of rims and the rings which fit in will have to match. Jigs become necessary to control the size and shape to the extent required. Fixing metallic elements at some places will improve the product. Wood stains can be used to get different shades.



Product 2

Current status :

Purpose :- walking stick, frames, treys, key rings, clocks

poor finish

no standards

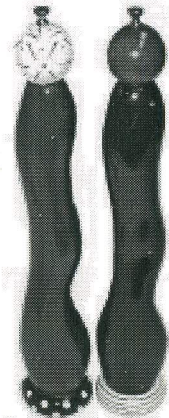
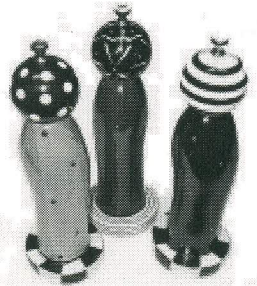
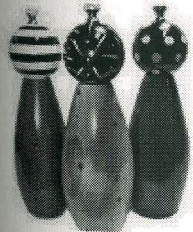
less use of additional material

uses one tool

Suggestions for Repositioning :-

suitable for open restaurants where these sticks can form the supporting structures of open shades e.t.c. and additionally the tribal rich look of the stick makes it fit for such places. (Conclusions are based on the discussion with some interior designers). well finished ones can go in the garden furniture.

Salt / pepper shakers can be very well done using nice colours and attractive shapes.



5.3 Design strategies :

Incorporating modern features :

Making the product contemporary here doesn't mean to change the shape drastically but to look for factors like compactness, stackability, modularity and overall user friendly or market friendly which means "as per the consumer expectations"

Surface finishes :

New surface finishes which means neat smooth surface which attracts one to hold the product. Brand name of the product should be well placed with the surface so that it becomes a part of the product. Then play of images at the surface can be delicately played with keeping the figure and ground in mind.

Well detailed products :

The introduction of metal ends, rings, knobs etc. can add value to the product. For this to take place efficiently the use of jigs and fixtures should be promoted and taught.

Variations :

Variations can be anywhere in terms of size, design, colour etc. can attract different customer segments. For example in the case of product 1 the number of repeated elements can be played with to make so many design variations. These items will find different customer groups who would like not the same product but will differ in their choice. Some one would like a really crowded one while another customer may like a less decorated one. Thus we see that the same product finds different customers with little effort at the manufacturers end.

Fusion :

Fusion of two different materials or two products can be done in a way that the outcome becomes a value added thing .For example in the product 2 inspite of taking the whole stick one can take only a small part (containing the knot or without the knot)of it and then perfecting it to a level with well finish that it can be fixed as a knob or handle.A well designed and finished piece can very well go as the amount of decoration is only in a certain part of the furniture .

New uses :

New uses of the same product with little design change can create another marke segment fot the product . For example the same well decorated bamboo sticks can go as handles in furnitures.

6. Conclusions and recommendations :

The compendium of handicrafts schemes has listed 37 schemes some (11-12) of which can be of use in this case but almost all of them applies to corporations, NGO's and institutes such as NIFT and NID.

The schemes offered by government rarely solve the purpose as the crafts people come there only because they know that they will be getting breakfast and or lunch. One alternative to this can be privatisation which will make things more organised. Then offering more relaxed schemes to private organisations/people will encourage them to start of their own.

For the purpose of package scheme of incentives the entire maharashtra state has been classified into groups -A,B,C,D and D+ . Group A represents the most industrially developed part of the state. Chandrapur falls under group D while some of its talukas like Mul Rajura and Warora fall under D+ (most under developed) and hence is eligible for maximum incentives.

7. Useful addresses :

Addresses of the five people whose cases were studied

1. Mr. Vasudev Chandrabhan Janabandhu /Arvind
Village Junona ,Dist. Chandrapur ,Maharastra
2. Mr. Vijay Hazare
Junona Naka, Dist. Chandrapur ,Maharastra
3. Chandra Sakharam Pungathi/Suresh Chandra Pungathi
Anandwan 442 914
Ta. Warora ,Dist. Chandrapur ,Maharastra
4. Anand Nirakar /Ravi Nafde
(temporary class/training center at Chandrapur stadium)
Bamboo Hastakala Dnyanpeeth
H.O.Nagpur
VEDHA - Institute of Village Enterprises Development for Handicrafts
Articles.
5. Mr. Manohar Sapre
Sarkar Nagar ,Mul Road
Chandrapur 442 401
Tele: 07172 - 50087
102 , Jubilee Mansion,9,Yari Road,
Varsova,Mumbai,400 061
Tele : 022 - 632 69 98 , 632 35 75

Other addresses :

6. Mr. Shankar Tamhan
Industrial and marketing -advisor and surveyor(Govt. registered)
Super natural ply pvt. ltd.,
Chairman to some small organisations,
C/o Badrinarayan Soni,Shriram ward,
Chandrapur
Tele : (07172) 54221
7. Mr. Chandan Haldar
Bamboo products marketer in Mumbai
2/B , Swanand Society,Gokhele rd.,
Naupada,Thane 400 602
Pager no. 9604 - 156502
E- mail : chandan_haldar@usa.net , haldar@india.com
8. Director Handicrafts
Office of the developement commissioner handicrafts
Ministry of textiles govt. of India
Arun house ,3rd floor ,P Nariman Street
Fort , Mumbai 1
Tele : 2663854 , 2660911

8. Bibliography :

Books

Bamboos current research
Proceedings of the international bamboo workshop, Cochin, India
Editors : I V Ramanuja Rao, R Gnanaharan, Cherla B Sastry

Get up, work shop on bamboo ,design tools, small technologies and finishes for bamboo
conducted by IDC, IIT Bombay
organised by C B T C , N E F D I , Guwahati

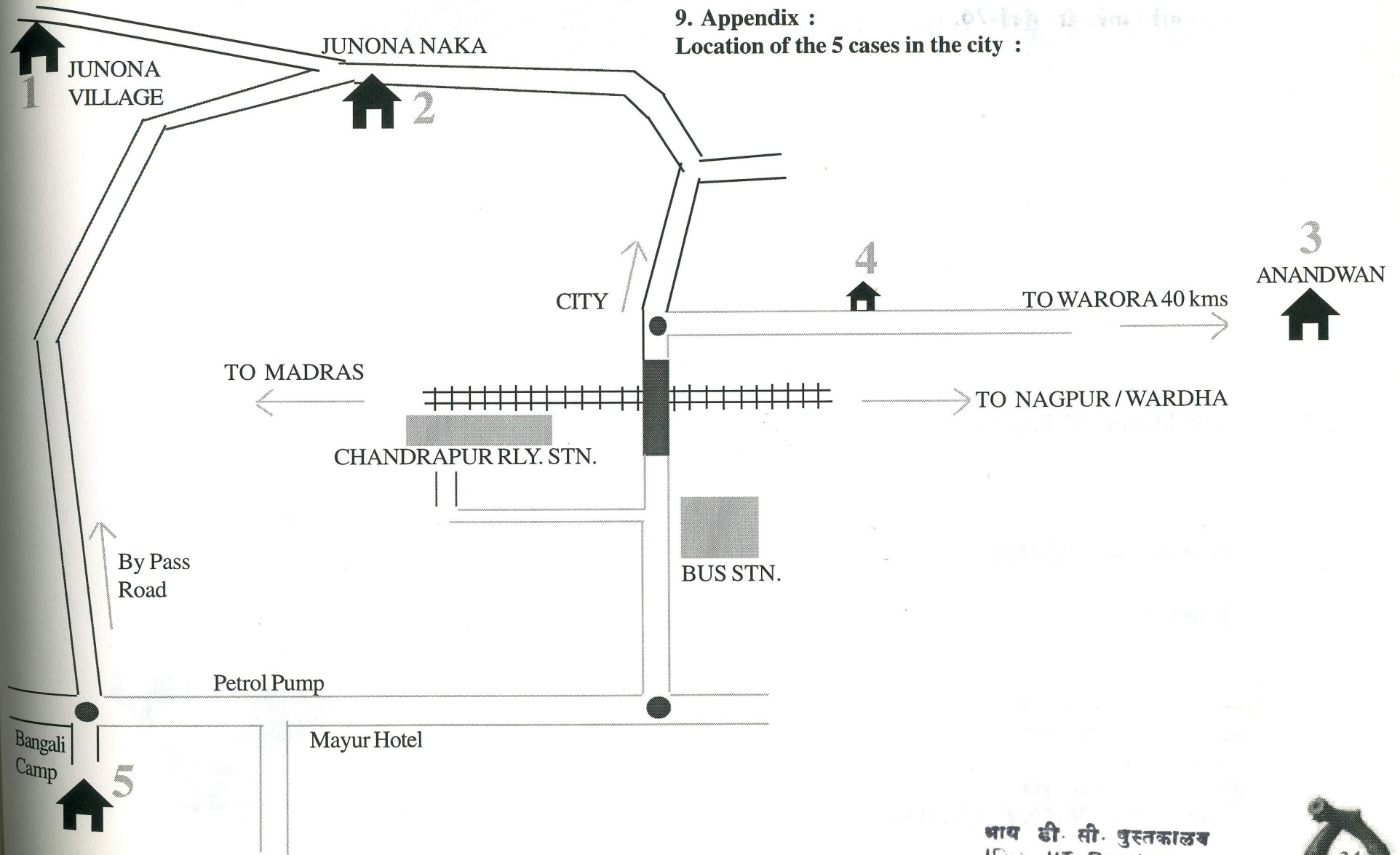
Bamboo craft design
A G Rao and Madhavi Koli
IDC, IIT Bombay

Compendium of handicraft schemes
office of the development commissioner(handicrafts)
govt. of India (Ministry of textiles)

Web sites :

<http://forests.org/ric/Projects/india.htm#ARS> Overview
<http://www.maharashtra.gov.in/english/invest/scheme.htm#sscale>
<http://www.bamboo.org/abs/About.html>
<http://www.hiindia.com/business/docs/corporate/map.html>
http://www.hiindia.com/business/docs/corporate/m023_10.html
<http://www.techno-preneur.net/timeis/maharashtra/incentives.html>

9. Appendix :
Location of the 5 cases in the city :



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