

A brief outline of the proposed  
EXPLORATORY ANALYSIS OF THE "PEOPLE OF INDIA" PROJECT DATA

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**1. Introduction**

While it is impossible to capture the rich cultural complexity of the Indian society in its full glory in mere words or numbers, the ethnographic information collected and compiled under the 'People of India' project of the Anthropological Survey of India by Prof. K.S. Singh, Director General, and his colleagues does offer a breath taking synoptic overview of it. This unique, unprecedented and voluminous data set is bound to keep an army of scholars busy in exploring it for decades to come. I briefly describe here the data, the kind of analyses to be carried out, and the expertise available at the Centre for Ecological Sciences, Indian Institute of Science, Bangalore, along with the Anthropological Survey of India for undertaking this exciting endeavour.

**2. The data**

The People of India project has covered 2753 communities distributed over 32 states and Union territories of India. Since many communities spread over more than one states were studied separately in each of the states, data is available on 4635 community elements. A total of 776 traits, covering the entire gamut of history, social organization, ecology, rituals,

occupations and impact of developmental programs, were recorded for each of the communities. This data has been computerized, repeatedly scrutinized and validated. In addition, detailed write-ups on each of the communities have also been prepared by the Anthropological Survey of India (ASI), and are available in computer readable form.

At the Centre for Ecological Sciences (CES), districtwise data is available on a number of environmental (eg. rainfall), ecological (eg. extent of forest cover) and socioeconomic (eg. population, agricultural productivity etc) variables. This is supplemented by more detailed information on several village clusters, collected as a part of the Human ecology program of CES. The ASI has also recorded the distribution of communities at the district level. More detailed information on the distribution (and populations etc) for the scheduled caste and scheduled tribes is being obtained from the Census of India.

### **3. Exploratory analysis of the data**

It is proposed to undertake two types of investigations - obtaining answers to specific questions directed at one or a few traits, as well as exploration of broad patterns revealed by the data.

Thus, correlations between pairs of traits would be used to obtain correlates of, for example bride price, and to contrast these with the correlates of dowry. While it is true that many of the traits showing high positive or negative correlations would be easily anticipated by experienced anthropologists, the

relative magnitude (or relative strengths of different influences) may be better obtained by the quantitative analysis. A hierarchial analysis of such correlations (i.e., correlations as seen at the district, state, regional and All-India level) may also be carried out, to elucidate the extent of correlation which may not be intuitively evident. As will be emphasised later, detailed statistical analysis and extensive computation will be used, not in lieu of, but as a powerful supplement to anthropological wisdom.

Exploration of broad patterns would involve three somewhat separate approaches. A community based analysis, using the techniques of cluster analysis would attempt to obtain distinct collections of relatively homogenous groups of communities. A trait based analysis along similar lines would lead to a more natural grouping of traits. Finally, an examination of spatial patterns based on districtwise data would reveal the extent to which the cultural patterns in communities are shaped by environmental factors.

#### **4. Expertise available at the CES and ASI**

The ideal way of obtaining insights into the cultural diversity of Indian population from this data would involve a multi-disciplinary approach. Fortunately, the team involved in this analysis from CES and ASI have perfectly complementary skills. I have more than a decade of experience in handling large and complex data sets from a variety of disciplines, ranging from meteorology, to molecular biology to animal behaviour and plant

ecology. Together with the familiarity with computer programming, mathematical and statistical modelling, and use of computers for efficient analysis and visual representation of data and results, I feel reasonably confident of embarking on the analysis of this rich data set. While my present almost total ignorance of anthropology would make it look as if I am rushing in where angels would fear to tread, I feel that I may be able to turn this ignorance into an advantage; making me the more objective and unbiased. A major reason for my confidence in expecting some success in this undertaking is the continued involvement and support of Prof. Madhav Gadgil, who would bring in his extensive experience in ecological theory as well as the detailed knowledge of human ecology. The much needed anthropological background, opinions, insights, and more important, criticism would be possible due to the active participation of Shri Suresh Patil, a social anthropologist from ASI closely involved with the People of India project. Needless to say, the vast experience and expertise of ASI, of Prof. K.S. Singh and his colleagues would always be available for us to draw upon.

## 5. Conclusion

While detailed anthropological surveys and then compilation and analysis has been an on-going activity in anthropology, the People of India project has been for the first time capture many important characteristic of the entire Indian society, with its over 2500 constituent communities. The easy availability and increasing sophistication of computers and software makes this a propitious point in time for undertaking a multivariate

statistical analysis of the People of India project and associated data. With the combined expertise and experience in mathematical and statistical modelling and computation, human ecology and anthropology, available at CES and ASI, the proposed exploration of the patterns cultural diversity of the Indian population, based on the People of India data, promises to be an exciting adventure.

ANALYSIS OF PEOPLE OF INDIA DATA :  
THE SECOND PHASE (1992 - 95)

This proposal aims at a much more complete analysis of the voluminous data collected by the Anthropological Survey of India (ASI) through its People of India (POI) project. This would involve developing the POI data base further to the district level and combining it with the natural resources data base put together by the Centre for Ecological Sciences, Indian Institute of Science (CES). After thus strengthening the data, it would be subjected to multivariate statistical analysis, as well as interpreted in terms of ecological parameters, areas in which CES has developed considerable expertise.

SECTION I

Background of the project :

The Anthropological Survey of India (A.S.I.) launched the project on People of India in 1985. Though during the colonial period, excellent ethnography was produced on some communities, a large number of communities were treated sketchily, and also not all the parts of India were covered. Impact of development and change and the factors which bring communities together were not at all touched by the colonial ethnographers. The objective of the project therefore was to generate a brief descriptive anthropological profile of all communities of India, the impact of change and development process on them and the linkages that bring them together. This was in accordance with the objectives

of the A.S.I. established 45 years ago, in December 1945, which has been pursuing bio-cultural researches among different population groups from its eight regional centres. Its objectives have been redefined in the policy resolution adopted in 1985 which commits this organization to the survey of the human surface of India.

Listing of communities in the colonial period on an extensive scale started from 1806 onwards. The process gathered momentum in the censuses from 1841 to 1941. At the inception of the project POI various lists of communities based on earlier ethnographic surveys, the lists of scheduled castes and scheduled tribes drawn up by the government of India, the lists of backward classes drawn up by Backward Classes Commissions set up by various state governments and the list that existed in the Mandal Commission Report were pooled together to form a tentative national list of communities to begin with. Total number of communities in this list was 6748. There were many synonyms and spelling variations in this list. This list was taken to the field, tested and checked and finally the A.S.I. was able to identify and study 4599 communities. Each of 6748 entries of the earlier list was accounted for in order to ensure that no community was left unstudied.

Unlike the surveys in the colonial period which covered British India and a few princely states, this project covered the whole country bringing within its ambit such parts of the country that had not been ethnographically surveyed earlier or where the

survey had been done in a perfunctory way. Each state and union territory was treated as a unit of study and information was generated uniformly on all communities based on a 17 point schedule guideline. Investigators for the survey were identified for each area on the basis of their experience and expertise in it. Teams of investigators of the survey and local scholars were set up for each state and union territory. Workshops and discussions were organised in every state and union territory to plan the surveys, seek the cooperation of local scholars, generate and evaluate findings etc. Later, editorial boards consisting of local scholars - at least one of whom was nominated as co-editor for the state volume - were set up for each state and union territory. Cooperation of the state governments in implementing the project was sought, particularly from the welfare and backward classes departments of the state governments, local officers of Census of India, tribal research institutes, university departments of anthropology, other departments of local universities etc.

Information for the project was collected based on a 17 point schedule guide line which included items like general information on a community, its history and migration, constitutional status, natural habitat, food habits, bio-anthropological information available from secondary sources, social divisions, hierarchy and varna status, marriage practices, life-cycle rituals, natural resources, occupations, link with market, religion, deities, intercommunity relations, development processes, and so on. As a part of the project a computer format

listing 777 traits was designed and quantitative data were computerized in collaboration with the National Informatics Centre, New Delhi which resulted in a vast database on various Indian communities. A univariate analysis was carried out in early 1991 in which count of each trait and its percentage was calculated. A few results of this analysis are given below.

Preliminary results :

An interesting finding of this project has been about the spread of the communities across the states. Eighty three per cent of the communities are located within the boundary of state/union territory. This shows that the states/union territories are not only linguistic and cultural but also social categories. Nine per cent of the communities are spread across in the adjoining area of two states and 3.3 per cent are spread over three states. Thus many as 96 per cent of the communities of India concentrated in and around the existing state/union territory. Only 4 per cent of the communities are spread over more than 4 to 13 states. The number of such communities in more than 7 states is 15. The Dhobi, Jain, Jat, Mali, Pasi and Sansi are found in eight states, while the Bairagi, Chamar, Khatri and Rajput are spread over nine states. The Lohar and Pathan are found in ten states, while the Khatik are found in 11 states. The Jogi and Teli are spread in 13 states. These communities comprise "servicing" or professional and artisan groups among others.

Most of the communities of India see their distribution at state level (63 per cent). There are 14 per cent of the

communities who identify themselves at national level and 3 per cent do so at transnational level. Indians have been migrants par excellence. Nearly 59 per cent of the communities claim to have migrated to their present habitat. In terms of immigrants in a state/ut, Delhi tops with 83 per cent of migrant communities, followed by Assam (75 per cent), Andaman & Nicobar Islands (71 per cent), and so on. Even the lowest in this order, Kerala, has 42 per cent of migrant communities.

At the instance of the Central Institute of Indian Languages two items were included, one on the languages spoken within the family or kin group, and the other on the languages/dialects spoken with other communities. It has been possible to generate, for the first time community specific data on languages/dialects of India and the first standards list of 305 languages/dialects as against the 1961 census list of 1652 languages. A significant aspect of the finding has been in regard to the number of tribal communities speaking the Dravidian (110 communities), Tibeto-Burman (142 communities) and Austro-Asiatic languages (31 communities). Another significant aspect of the finding has been about the pattern of bilingualism. As is known we have applied uncritically the western concept of monolingualism in our country which is essentially an area of linguistic pluralism. The Census of India following the western model estimated bilingualism rather conservatively at 13.4 per cent (1971 Census) which of course showed a rise from 9.7 per cent reported in 1961. However, according to the data collected in situations of culture contact we find that the incidence of bilingualism is as high as

65.5 per cent in terms of the number of communities. Among the tribes and non-tribes living together we have now a rise of such linguistic formations as Sadri, Desi, Nefamese and Nagamese.

An important finding of the project relates to the diversity of occupations. Colonial ethnography reported the prevalence of a very large number of occupations like bird trapping which was intimately connected with the then state of environment and of exotic occupations like acrobatics, begging etc. A few of these have not disappeared but continue on a much smaller scale, as members of such communities have taken to working as labourers etc. There has been, however, a sharp decline in traditional occupations like hunting and gathering which has gone down by 44 per cent, trapping of birds and animals (33 per cent), shifting cultivation (29 per cent), pastoral activities (10 per cent) and priestly functions (16 per cent). There has been a rise in relatively new and modern occupations like horticulture (40 per cent), cultivation both settled (31 per cent) and terrace (34 per cent), wage labour (69 per cent), animal husbandry (36 per cent), sericulture (80 per cent), business (70 per cent), trade (53 per cent), industry (82 per cent), industrial worker (95 per cent), service in government and private sectors and so on. Professional groups who depended on the traditional knowledge of astrology, acrobatics etc., have suffered an erosion of their trade avocation.

Settled cultivation which tops all avocations is pursued by 2502 communities (55%) followed by wage labour (2460, 53%) and

animal husbandry (1011, 22%). Fishing is pursued by 387 communities (8.5%). Textile weaving is reported in regard to 312 communities (6.6%), spinning 67 (1.5%), dyeing 67 (1.6%), masonry 188 (4.1%), pottery and terracotta 56 (1.2%), wood work 184 (4.1), salt making 20 (0.4%), glass work 9 (0.1%), skin and hide work 116 (2.5%), jewellery 90 (2.1%), stone carving 48 (1%), ivory ,bone and horn work 16 (0.3%), metal work 144 (3.1), basket making 309 (6.7%), mat weaving 160 (3.5%), mining and quarrying 65 (1.4%) and specialized service such as priests etc., in 305 communities (6.6%).

Of modern occupations government service is the most sought after with as many as 3021 communities (66%) reportedly having their members in it. Participation is on the increase in business (2049, 44.4%), trade (872, 19%), industrial work (852, 18.5%), private service (2201, 48%) and self employment (2392, 52%). It can be said, as the figures suggest, that there are not many communities, members of which follows only one occupation.

## SECTION II

### *STATISTICAL ANALYSIS*

From June 1991 onwards more vigorous and multivariate analysis started in collaboration with CES. A sum of Rs. 86000 has been granted towards this work. A brief summary of analysis done at the CES under each heading is described here. Rather voluminous printouts generated during the process have been filed separately.

## I Analysis of the distribution of the traits

### (a) Statewise distribution : How many states show the trait ?

Of the 777 traits, 151 are seen to occur in all the 32 states/Union territories, and 122 are seen in 31 of the 32 states/uts. At the other extreme, two traits (tapping as an adopted occupation and female primogeniture) occur in only a single state (Diu & Daman and M.P, respectively).

### (b) Pattern of Distribution : Which states show the trait ?

A total of 414 traits are distributed such that each one shows a unique pattern of distribution. Of the remaining, 151 are seen in all the states, 79 in all except Lakshadweep, 22 in all except Diu & Daman and 12 in all except Mizoram. Thus, apart from the more widely distributed traits, most traits seem to have a unique 'signature' of distribution.

## II States\Union Territories based analysis.

### (a) Characteristic traits of a state

For a given state (or Union territory), a trait has been called 'characteristic' if

- (i) It is significantly more abundant in that state compared to the rest of the country, and
  - (ii) It is shown by 90% or more communities in the state.
- Out of the 777 traits of POI data, 216 traits are seen to be characteristic of one or more states.

(b) Similarity between states

The similarity between states is worked out based on the correlation coefficients calculated from the proportions of communities showing each of the 777 traits.

Using the technique of metric multidimensional scaling, the states are shown as points in a plane, such that the distance between the points corresponding to a pair of points is proportional to the dissimilarity between the corresponding states i.e. similar states occur close together.

A dendrogram based on a single-linkage clustering of the states has also been prepared.

III Correlations between traits.

(a) General patterns

After choosing an arbitrary cut-off of 50, correlation coefficients were calculated between all the pairs of 663 traits. Of these 219,453 pairs of correlations, about 20,623 have magnitudes higher than 0.50. On an average, a trait shows such a high correlation with 63 others traits (i.e. mean=63, median=45). More specifically, 485 pairs have values higher than 0.90, and 1745 have values less than -0.90 .

Details of the 20263 pairs of correlations have been stored in the computer. Correlation analysis reveals that low caste ranking (0.82) sudra status (0.76), practise of skin and hide work (0.83) are more likely to occur among the scheduled castes (correlation coefficients given in parenthesis. Similarly,

shifting cultivation (0.98), phrarty system (0.93), animism (0.94), equal sharing of property among female members (0.79), bride-price in kind (0.8) and change of religion (0.61) are more likely to occur among the scheduled tribes. Out of 1919 communities who recognize their place in varna system 1564 worship regional deities showing a significance level at 0.58. Jains (0.97), Brahmans (0.88), those who practise thread-wearing ceremony (0.77) and those who have high self-perception (0.75) are more likely to be vegetarians. Those communities (1966) who are perceived by others as occupying middle level in local hierarchy are also likely to have their self-perception at middle level (1588 out of 1966) giving high correlation coefficient of 0.87.

It is interesting to note that nearly half of the 92 Buddhist communities (44 out of 92) are scheduled tribes and 69 out of 92 are regular non-vegetarians. The reason probably is that 18 of them are found in high attitude areas of Himalayan ranges, 50 of them in hilly terrain abound with wild life and a few among the rest are converts from scheduled caste Hindus now known as neo-Buddhists. Also of interest to note is 151 out of 346 communities who subscribe to Christianity are scheduled tribes especially from north east India and hilly ranges of Southern India. Half of the communities who depend on trapping of birds and animals (102) are scheduled tribes and nearly half of them are also involved in fishing(41) Hindu communities are more likely to have clan system (2513 out of 3506), clan being found in 2972 communities, worship of regional deities (2218) and

observation of death pollution ( 2688 ) are highly correlated with existence of clan system. Those who cremate the dead (1598 out of 3011), observe death pollution (1846 out of 3883) worship regional deities (1564 out of 3011) and ancestors (1619 out of 3323) are likely to recognize and place themselves in one or the other varna status.

Observation of puberty rites for girls (1031 out of 1193) is almost a rule for those communities who practice cross-cousin marriage where the correlation coefficient is as high as 0.81. Almost all communities which observe puberty rites practice adult marriage(96%) and monogamy (99%). Shifting cultivators(0.85) and polyandrous societies (0.78) are more like to pay bride-price in kind--probably their economies are not fully monetized yet. All those who claim to be Kshatriyas are patrilineal people who almost always cremate the dead and have priests from other communities. Recognition of varna system (1235 out of 2424, 0.69), observation of gotra exogamy (1235 out of 1246, 0.58), vegetarianism (760 out of 767, 0.54), worshipping of regional deities (2976 out of 3011, 0.66), low status of women (3265 out of 3311, 0.63), equal share in property to all sons (3559 out of 3610, 0.68), cremation of the dead (2966 out of 3011, 0.54) observation of death pollution (2966 out of 3883, 0.51) and succession by the eldest son (4294 out of 4378, 0.82) are the correlates of patrilineal descent and patrilocal residence. While higher status for women (0.87) equal sharing of property by daughter (0.99) and succession by nephew (0.93) are the correlates of matrilineal descent and matrilocal residence which

occurs among 42 communities. Correlation analysis reveals that, excluding the Muslims and Christians, the practice of burial is found more in southern India. Almost all pastoral communities (65) worship the ancestors which probably acts as a uniting force between the different families which are on move but meet once in while in order to worship of the ancestor. If a community is involved in shifting cultivation or trapping of birds and animals, it is more likely to have fishing as another pursuit, correlation coefficients being 0.95 and 0.87.

#### IV All-India level patterns

##### (a) Number of communities vs population size

A power law relationship seems to hold between the number of communities vs population size.

##### (b) Cultural diversity

A Graph showing number traits vs number of communities has been plotted which shows a hyperbolic dependence. The number of traits increases very sharply with the number of communities initially; it then reaches saturation rather fast. The predicted number of traits at the country level ( approx.710), is much lower than the actual number,perhaps once again emphasizing the increase in diversity at larger spatial scales. A similar pattern is seen in the relationship between the number of occupations and the number of communities.

#### V Correlates of family size

Of the 4599 communities, 3901 gave unique choice for the number of preferred children; 642 (16.5%) prefer one or two, 2270

(58.1%) prefer three and 989 (25.4%) prefer 4 or more children. All the traits were examined for their co-occurrence with small or large family size preference, at 5% level of statistical significance. Additionally, traits showing monotonic changes in proportions while going from small to medium to large family size were also tabulated. It was seen that government service and girls studying upto post-graduation level show a high association with a small family size, while shifting cultivation was highly correlated with high family size.

### Resulting Publications

The Anthropological Survey of India in collaboration with the Centre for Ecological Sciences has produced the following six volumes based on the analysis of data :

1. People of India : A Quantitative Profile for all communities.
2. People of India : A National Consolidated list of communities - Appendix to Vol I.
3. People of India : The Scheduled Castes and the Scheduled Tribes - A Quantitative Profile.
4. People of India : A National Consolidated list of tables for minority Communities.
5. People of India : A National Consolidated list of tables for Secular Economic Categories.
6. People of India : A Cultural Map.

These six volumes were released by the Honorable Minister of Human Resource Development, Government of India, Shri Arjun Singh, on 24 December, 1991 in New Delhi. A part of the analysed

data was also displayed on Doordarshan in the series "Tana Bana" on 28 December, 1991.

### SECTION III

#### Projected analysis for the coming three years :

The Anthropological Survey of India is planning a long term collaboration with the Centre for Ecological Sciences in a more elaborate analysis of the data generated under the People of India project. No fresh field work is contemplated in connection with this exercise. We propose now to analyse the data down to the district level and in relation to the ecological, cultural and economical data generated by other sources. As a first step towards this we have already completed the listing of the communities at the district level by incorporating the district-wise census lists of SC/ST communities, compiling the lists of the communities described in the district gazetteer and those of the communities in census village monographs (which has been computerised by the Centre). A problem in this respect relate to establishing the equivalence of the communities mentioned in the district gazetteer with their present day counterparts identified under the People of India project. The second step taken by us in this respect has been to feed computerised community-wise data generated under the All India Bio-anthropological Survey. This has also been taken up. Once this is complete, which is expected to take about three months, district level data set of the People of India would be ready to be linked with other district level data bases such as land use pattern, agricultural

productivity, and so on, available with the Centre for Ecological Sciences. Many new insights would emerge through a district level analysis of this combined data set. Several types of analysis are possible with the district level data base and a few important ones are mentioned below :

(i) Clustering of traits at the district level

This type of analysis would delineate the characteristic traits of a given district. Such information would be most useful while chalking out district level development programmes.

(ii) Districtwise mapping of the traits

A district level atlas of traits would become available for planners and researchers.

(iii) Delineation of eco-cultural zones based on the clustering of traits.

A real data based zonal map of the of country could be prepared using the distribution pattern of 777 traits .

(iv) Clustering of communities based on 777 traits.

All the 4599 communities studied under People of India will be subjected to cluster analysis for a set of significant traits. This type of analysis is likely to reveal hitherto unknown connections between the communities, validate historical migration patterns, diffusion of traits within a given eco-cultural area, and so on.

Anthropological Survey of India has two other data bases on bio-physical aspects of Indian population. Data of two major physical anthropological projects, namely. (1) All India Anthropological Survey South Zone and North Zone, and (2) All India Bio-anthropological Survey carried out by the Anthropological Survey of India have been computerized. All India Anthropometric Survey gives information on 14 bodily measurements such as stature, sitting height, head length, head breadth, minimum frontal breadth, bizygotic breadth, total facial height, upper facial height, nasal height, nasal breadth, auricular height, circumference of the head, weight, etc. These data are from 109 groups from southern states (Andhra Pradesh, Karnataka, Tamil Nadu and Kerala) comprising various tribes, scheduled castes, occupational caste groups and other important caste groups. The north zone data comprises 14 somatometric measurements of 16 groups from each district drawn from higher ranking caste, scheduled tribes and backward caste groups, with a minimum sample of 50 individuals from each group.

The All India Bio-anthropometric Survey was conducted on a grid with 351 cells of India taking 100 households in each cell. Information was collected from 100 households of each locale on ethnicity, dietary habits, height, weight of adult individuals, marriage pattern, consanguinity and demographic information of each family. This data base will be integrated with the main People of India data base. With this a full scale analysis of Indian population in terms of both cultural and physical aspects at the district level becomes possible.

The computer format which was canvassed along with 17 point schedule guideline for the project initially had 777 traits. Provision was made in this format to report those aspects of social phenomena which could not fit into the precision defined codes. Many new things returned under this head, to cite an example, 300 odd different occupations came into light in this project which were then coded and standardized.

It is also proposed in this follow-up project to enrich the coded data with the descriptive account of each community, which is being computerized. Many more items can be added to the computer format data from the descriptive material such as etymology of the community name, exact place of migration, particular dress pattern, main and subsidiary diet, local terms for life-cycle rituals, primary and secondary occupations, exact change of occupation, names of the deities worshipped, effect of particular development programmes on particular communities, and so on. Another important data base that would emerge as a by product out this exercise is a community-wise bibliography for all the communities.

Under the People of India project, a vast number of names of various social divisions (nearly 65,000) such as surnames, clans, lineages etc., have been collected and computerized. Two ASI projects on the Dictionary of Personal Names and the Dictionary of Place Names in collaboration with the Place Name Society of India, Mysore have been approved. Many hypotheses could be tested on the basis of this data, such as positive correlation

between the number of social divisions and the geographical range of a community. Further, with the identification of meaning and etymology of each of these social divisions, an excellent information system on social formation will be created. It would be a cross-linked database ready to provide all related information on any given social division. In fact, by the end of the proposed project, a comprehensive information system on the Indian population would become available.

Publications :

The collaboration in the analysis of data in the second phase is expected to result in the preparation and publication of the following volumes under the national series :

1. People of India : a district level analysis
2. People of India : an ecological profile
3. People of India : response to developmental process.
4. India: an atlas of environmental issues

It is expected that many works both collaborative and done by individual scholars in the form of monographs will emerge at a later date. However, it is proposed to make a financial provision for the publication of the three above mentioned volumes only.

Time table for the project :

April to December 1992 : (1) Establishing equivalence between the communities of various data bases and preparation of district level data set.  
(2) Clustering of traits at district level and distirctwise mapping of traits.

- January to June 1993 : Delineation of eco-cultural zones and  
zonewise analysis.
- July to December 1992 : Cluster analysis of all the communities.
- January to December 1993 : Building up to total information system  
on Indian population and final bio-  
cultural analysis.

Financial requirements for the project :\*

(in thousands)				
	I year	II year	III year	Total
Contingency (including charges towards help in data entry and computer programing)	120	120	130	370
Consumables	35	35	40	110
Geographic Information System	200	-	-	200
Report generation	20	20	30	70
Travel	20	20	20	60
Discussion meeting	30	30	30	90
Publications	-	-	300	300
<b>TOTAL</b>	<b>425</b>	<b>225</b>	<b>550</b>	<b>1200</b>

\* inclusive of 15% overheads for Indian Institute of Science.

Co-ordination :

Dr. Niranjan Joshi, Centre for Ecological Science, Indian Institute of Science, Bangalore and Shri Suresh Patil, Anthropological Survey of India, Southern Regional Centre, Mysore, will be the two Principal co-investigators for this project. The ASI, Mysore centre will provide funds and all other facilities and co-ordinate with CES. Dr. K.S. Singh, Director General, Anthropological Survey of India, and Prof. Madhav Gadgil, Centre for Ecological Sciences, Indian Institute of Science will provide overall guidance for the conduct of the project. In addition, Dr. Anil Gore, Department of Statistics, Poona University, Prof. K.C. Malhotra, Division of Biological Sciences, Indian Statistical Institute, Calcutta, and other scholars will be consulted while analysing and interpreting the data. As CES will also be contributing its own data, ASI and CES will jointly organise, edit and publish the material.