North Eastern Region as a distinct Entity: The first question that naturally comes to one's mind is: can one make a clear cut distinction between the states belonging to the North Eastern Region and those belonging to the rest of India? To answer this question one may use some variables as the measures of the features of various states. It is obvious that geographically the states of the North Eastern Region have distinct features; they all have mostly or significantly hilly terrain relatively less densely populated, with area under forests significantly high, they experience high rainfall, the percentage of schedule tribes in the total population is quite significant and so on. All these characteristics have bearing on the population features, urbanization, literacy, work participation, etc. On the basis of these characteristics, it is possible to make a distinction between the states of NER and the rest in the country.

One may use Discriminant Analysis as a statistical tool to test the hypothesis relating to the said issue. This is what has been done here. Twelve variables measuring various aspects of features of population in various states of India have been used to carry out Discriminant Analysis. In the first set are the states not belonging to NER while in the second set are the states belonging to NER.

Table 1: State wise Features of Population (1991 Census)

State/Var	X1	X2	X3	X4	X5	X6	X7	X8
Andhra	26.89	15.93	6.31	2.17	16.49	242.00	44.09	55.13
Bihar	13.14	14.55	7.66	2.11	20.57	497.00	38.48	52.49
Goa	41.01	2.08	0.03	1.49	11.74	316.00	75.51	83.64
Gujarat	34.49	7.41	14.92	1.92	16.53	211.00	61.29	73.13
Haryana	24.63	19.75	0.00	2.42	18.98	372.00	55.85	69.10
Himachal	8.69	25.34	4.22	1.89	16.25	93.00	63.86	75.36
Karnatak	30.92	16.38	4.26	1.92	16.63	235.00	56.04	67.26
Kerala	26.39	9.92	1.10	1.34	13.19	749.00	89.81	93.62
Madhya P	23.18	14.55	23.27	2.38	19.78	149.00	44.20	58.42
Maharas	38.69	10.84	9.27	2.29	17.11	257.00	64.87	76.56
Orissa	13.38	16.20	22.21	1.83	16.89	203.00	49.09	63.09
Punjab	29.55	28.31	0.00	1.89	16.30	403.00	58.51	65.66
Rajast	22.88	17.29	12.44	2.50	20.13	129.00	38.55	54.99
T Nadu	34.15	19.18	1.03	1.43	13.33	429.00	62.66	73.75
UP	19.84	21.05	0.21	2.27	20.27	473.00	41.60	55.73
W Bengal	27.48	23.62	5.59	2.21	16.98	767.00	57.70	67.81
Andam N	26.71	0.00	9.54	3.97	16.51	34.00	73.02	78.99
Dadra &	8.47	1.97	78.99	2.89	20.46	282.00	40.71	53.56
Daman &	46.80	3.83	11.54	2.52	15.53	907.00	71.20	82.66
Lakshad	56.31	0.00	93.15	2.51	18.30	1616.00	81.78	90.18
Arunach	12.81	0.47	63.66	3.14	21.12	10.00	41.59	51.45
Assam	11.10	7.40	12.69	2.17	19.73	286.00	52.89	61.87
Manipur	27.52	2.02	34.41	2.57	16.69	82.00	59.89	71.63
Meghalay	18.60	0.51	85.53	2.84	22.18	79.00	49.10	53.12
Mizoram	46.10	0.10	94.75	3.34	18.60	33.00	82.27	85.61
Nagaland	17.21	0.00	87.70	4.45	17.15	73.00	61.65	67.62
Sikkim	9.10	5.93	22.36	2.51	18.37	57.00	56.94	65.74
Tripura	15.30	16.36	30.95	2.95	18.03	263.00	60.44	70.58

Table continued

Table 1: State wise Features of Population (1991 Census)

State/Var	X9	X10	X11	x12
Andhra	32.72	45.05	55.48	34.82
Bihar	22.89	32.16	47.92	14.86
Goa	67.09	35.28	49.56	20.52
Gujarat	48.64	40.23	53.57	25.96
Haryana	40.47	31.00	48.51	10.76
Himachal	52.13	42.83	50.64	34.81
Karnatak	44.34	41.99	54.09	29.39
Kerala	86.17	31.43	47.58	15.85
Madhya P	28.85	42.82	52.76	32.68
Maharas	52.32	42.96	52.16	33.11
Orissa	34.68	37.53	53.79	20.79
Punjab	50.41	30.88	54.22	4.40
Rajast	20.44	38.87	49.30	27.40
T Nadu	51.33	43.31	56.39	29.89
UP	25.31	32.20	49.68	12.32
W Bengal	46.56	32.19	51.50	11.25
Andam N	65.46	35.24	53.32	13.13
Dadra &	26.98	53.25	57.50	48.79
Daman &	59.40	37.63	51.63	23.17
Lakshad	72.89	26.43	44.17	7.60
Arunach	29.69	46.24	53.76	37.49
Assam	43.03	36.09	49.45	21.61
Manipur	47.60	42.18	45.27	38.96
Meghalay	44.75	42.67	50.07	34.93
Mizoram	78.60	48.91	53.87	43.52
Nagaland	54.75	42.68	46.86	37.96
Sikkim	46.69	41.51	51.26	30.41
Tripura	49.65	31.14	47.55	13.76

Definitions

X1 Urban P as % to Total Popn.
X2 SC Popn as % to Total Popn.
X3 ST Popn as % to Total Popn.
X4 Growth rate of popn. 81-91
X5 Pop. Aged 6 yrs as % to Pn.
X6 Density sq/km of Popn.
X7 Literacy rate (total)
X8 Literacy rate (Male)
X9 Literacy rate (Female)
X10 Work Particip rate (Total)
X11 Work Particip rate (M)
X12 Work Particip rate (F)

Note: Of these 12 variable, we have not used X7 and X10 since they have been represented by X8 + X9 and X11 + X12. Hence in Discriminant Analysis only ten variables have been used.

Source: **Basic Statistics of NE Region 2000**. *NEC, Govt. of India, Shillong*. Pp. 189-90. Refers to **Economic Survey, 1998-99**.

In the second set, Sikkim has been included, though traditionally, it is not included among the states of NER. This inclusion does not change our conclusion. Further, Chandigarh, Delhi and Pondichery (all Union territories) have not been included in the first set only because they are highly urbanized union territories and as such their inclusion in the analysis may imbalance the structure of the first set. After inspecting the effects of their inclusion, one may find that though the conclusions regarding the states in the NER does not change, the structure of the first set (states not belonging to NER) undergoes a significant change. Hence, justifiably, we have excluded these three Union Territories from our analysis.

Our analysis has shown that all the states in the NER (including Sikkim) have discriminant scores below 15.60 while most of the states in the rest of India (barring Himachal Pradesh, Kerala, Andaman & Nicobar and Dadra & Nagar Haweli Islands) have discriminant score above 16.80. The Mean discriminant score is 16.58. The finding is statistically significant. Discriminant scores of Himachal Pradesh, Kerala, Andaman & Nicobar and Dadra & Nagar Haweli are 16.55, 16.47, 16.16 and 16.57 respectively, all greater than the scores obtained by any state in the NER.

We may conclude therefore that the states in the NER are clearly distinguishable (on the basis of population features) from the rest of the states in India.

Table 2: Details of Discriminant Analysis

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Averages FOR SET1 ARE AS FOLLOWS
   27.6800   13.4100   15.2870    2.1975   17.0985
  418.2000   69.5565   46.4540   51.6885   22.5750

Averages FOR SET2 ARE AS FOLLOWS
   19.7175    4.0988   54.0063    2.9963   18.9838
  110.3750   65.9525   49.3450   49.7612   32.3300

Averages FOR POOLED SETS ARE AS FOLLOWS
   25.4050   10.7496   26.3496    2.4257   17.6371
  330.2500   68.5268   47.2800   51.1379   25.3621

DISCRIMINANT WEIGHTS ARE AS FOLLOWS
    0.0150    0.0224   -0.0124    0.0618   -0.1295
    0.0025    0.1522   -0.1295    0.2705   -0.0218

 DISCRIMINANT ELASTICITIES FOR SET1 ARE AS FOLLOWS
    0.0237    0.0171   -0.0108    0.0077   -0.1262
    0.0595    0.6030   -0.3425    0.7965   -0.0280

 DISCRIMINANT ELASTICITIES FOR SET2 ARE AS FOLLOWS
    0.0210    0.0065   -0.0476    0.0131   -0.1741
    0.0195    0.7106   -0.4522    0.9530   -0.0498

 DISCRIMINANT ELASTICITIES FOR POOLED SETS ARE AS FOLLOWS
    0.0230    0.0145   -0.0198    0.0090   -0.1378
    0.0498    0.6292   -0.3692    0.8346   -0.0333

DISCRIMINANT SCORES AND EXPECTED MEMBERSHIP FOLLOW
  1  17.69140 (1)   2  16.80176 (1)   3  17.02891 (1)
  4  17.76417 (1)   5  17.60019 (1)   6  16.55385 (2)
  7  17.82054 (1)   8  16.47118 (2)   9  17.06065 (1)
 10  17.54576 (1)  11  17.93230 (1)  12  18.13042 (1)
 13  16.91001 (1)  14  19.54805 (1)  15  17.84084 (1)
 16  18.70639 (1)  17  16.16129 (2)  18  16.57403 (2)
 19  19.40952 (1)  20  17.58113 (1)

 21  14.60900 (2)  22  15.22117 (2)  23  14.37145 (2)
 24  11.80314 (2)  25  13.87611 (2)  26  12.45804 (2)
 27  15.07641 (2)  28  15.59426 (2)

NOTE: Code 1 or 2 in the parentheses show expected membership
of the individual sample of Set1 or Set2 respectively

D VALUES [D1, D2 and GRAND D or D(3)] are as follows
  D(1) =  17.55662   D(2) =  14.12619   D(3) =  16.5765
F value =  6.174761
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North Eastern Region as an instance of a Dualistic Economy: As Boeke has put it, "*It is possible to characterize a society, in the economic sense, by the social spirit, the organizational forms and the technique dominating it. These three aspects are interdependent and in this connection typify a society, in this way that a prevailing social spirit and the prevailing forms of organization and of technique give a society its style, its appearance, so that in their interrelation they may be called the social system, the social style or the social atmosphere of that society*. Less developed economies, especially with a history of prolonged colonial rule, often exhibit a simultaneous existence of two (or more) enclaves of socio-economic systems, characteristically and conspicuously different from each other, and each dominating a part of the society, the economy and the polity. These enclaves markedly differ in matters of ownership of resources, production relations, the social spirit, institutions, customs, mores and attitudinal structure, socio-economic and political organization, technological know-how and its application and so on. Of course, between these enclaves there exists a gray zone where distinction may not easily be perceived. This gray zone might be the crucible for integration, but it is equally likely that a colloidal admixture of heterogeneous elements persists for long and camouflages integration process. In any case, the rate of integration is extremely slow such that these enclaves persist for long. The said enclaves often resist the functioning of each other. They function not in harmony but in conflict with each other. Frictional losses are significantly large. Such an economy has been nicknamed as a 'dualistic' or 'pluralistic' (depending on the number of enclaves coexisting) economy.

What makes an economist interested in studying such an economy is that explanation of the issues relating to operation, stability, growth and justice in such economies evade an application of a single theoretical framework. As one knows, much in economics, explicitly or tacitly, has been formulated on the basis of experiences in the Western developed economies. That is why some economists prefer to name such a body of economic theories as the "Establishment Economics". To explain the said issues in a dualistic economy, tools of the Establishment Economics fail. Nor the "economics of primitive societies" succeeds in the said explanation. So, the economics of such economies is in itself dualistic (pluralistic). A hybrid type of economics that one may venture upon to develop has internal contradictions and inconsistencies, and it cannot form a well-integrated body or a system of laws pertaining to the functioning of such an economy. So in the conceptual domain, one finds inconsistencies and in explaining the facts one performs only poorly. This is the challenge that makes the study of such economies interesting.

The challenge that such an economy makes to the planners and policy makers is still more intriguing. In the absence of an understanding of the laws that govern such economies, planners and policy makers can only poorly succeed in controlling the policy instruments to achieve the desired goals. Cumulative experiences of failing in controlling the socio-economic forces for achieving the targets often induce decision makers to indulge in ad-hocism. Experiences of failure, aspirations of economic agents and ad-hocism in decision-making together invite opportunistic elements to operate that further complicates the management of such economies. The uncertainty and risk that brew in such an environment raise social and private cost of economic operation. Expensive production system limits the growth prospective of such an economy and it is caught in the '*low-level* *equilibrium'* characterizing poverty, inefficiency, unemployment of manpower together with under-utilization of available economic resources and so on.

The typology of dualism is primarily based on five basic, though often inter-related, criteria, namely, societal, economic, political, spatial (geographical) and ethnic. Societal criterion comprises value system, inter-familial and intra-familial relations, forms of social organization and so on. Economic criterion covers ownership rules, production relations, forms of economic organization, the spirit of economic activities, etc. Political criterion is mainly concerned with the conventions governing formation and functioning of, and changes in, political organizations. Spatial criteria relates to predominance of the socio-economic system as distributed over space. Ethnic criterion relates to cultural and racial attributes of the population.

D. C. North has pointed out that the economy of a particular society is historically shaped by three major factors, the resource base, the infrastructure and the social spirit. The resource base of a region, to begin with, greatly influences the manner in which the society develops its ways and means to livelihood. Economics, which, according to Alfred Marshall, is the study of mankind in the ordinary business of life at the individual and the social levels in acquiring, managing and utilizing the material requisites of well-being, naturally has to refer to resource base on which an economy has grown and subsists. Therefore, the economics of a hilly terrain would, at least in its primary stages of development, be different from the economics of a river valley or a desert for that matter. The infrastructure or the social overhead capital in a region is a result of accumulated investment at the social level in the past. Much of it depends on how much a society has produced, saved and invested over time in building up the social overhead capital. Poor societies endogenously can hardly build up rich social overhead capital and for obvious reasons of meager savings. Moreover, private indigenous investment in social overhead capital goes contrary to the private interest unless an organized effort is made by a body corporate for exploiting the resource base of the region. Development of the social overhead capital in the British India substantiates the point. Next, many complex forces historically shape up the social spirit of a society. Max Weber has elaborated how the Protestant ethic moulded the spirit of capitalism in the West. Galbraith (The Nature of Mass Poverty) discusses how accumulated experiences of failure may give rise to inclination to resignation and accommodation. Veblen has shown as to how the value system of a society is shaped up by the dominant (Leisure) class. M N Srinivas has shown how the forces of sanskritisation overtake a society imitating the dominant social class.

"The standards of economic rationality are not formed in a vacuum. To understand it, let us consider the individuals who make up an economy. People have many and varied wants. Until man has reached a fairly high level of attainment, the systematization of these wants and the ordering of preferences within the possibilities permitted to the individual is not possible. Where this high level has not been reached, man's behaviour will be determined entirely according to custom or impulse. In the former case a person's behaviour always fits a fixed pattern which is decided by custom. Even where it is possible for him to follow a course whose outcome would clearly be more favourable than that given by custom-dictated behaviour, being unaware of it, he will behave as he himself did in the past, and as other people are doing at present. On the other hand, in the latter case, a person's conduct is subject to no rule whatsoever; from the various possibilities confronting him he simply adopts randomly whatever enters his head. These are two extreme cases, but they have this in common: there is no surveying of the totality of possibilities facing a person; there is no comparative consideration taken of them. People who are unable to order their wants and to exercise self-control will probably belong either to the type which is ruled by blind obedience to custom, or to the type governed by impulse. They are unable to behave with objective rationality. However, educational systems have been established, and as a result modern man is educated, at least up to the point where he can arrange his wants in his own preference order. When people are able to order their wants, what has to be done to be best able to satisfy those wants becomes clear. A person's behaviour may change in the face of each change in circumstance, but the conclusion to be drawn from this is not that he is arbitrarily changing his mind, but that he is adopting his behaviour to changing circumstances in order to carry through the principle of maximum satisfaction of wants." (M Morishima : The Economic Theory of Modern Society,Cambridge Univ Press, Cambridge, London, 1976 pp. 12-13).

"In modern society places of work are separated from households. Not merely are official money and materials distinguished from the private property of the head of the enterprise and his staff, but no confusion is permitted between decision relating to the running of the enterprise and the decisions of households. That, in almost all cases, the workplace and the private dwelling-place are in different places is the reflection of this fact. This separation is one of the important features of modern society. In the patrimonial state and the feudal state, for example, there was no distinction between the national administration and the sovereign household. The government officials of these states were family servants who disposed of matters which really pertained to the sovereign's household. Even in the middle and the late modern period, employed agricultural workers, who were engaged for a fixed period of time for wages, lived under the roof of the employer, were supplied with clothing as well as food by him, and were put to work cultivating or at other tasks at his command. This confusion and lack of differentiation still occurs in a modern society. From the point of view of economics, the failure completely to separate the enterprise and the household is most note-worthy in the case of agriculture and the private business. Because of the fragile basis on which the farmer and the owner of the private firm conduct their businesses, it is difficult for them to resort to the modern capital market for finance, and they must therefore supply the greater part of their needs for finance from their own savings. They differ from company officials, government officials and workers; they are not in a position to make large consumption decisions until they have considered the disposal of the funds relating to their business operations. Their household consumption plans and their business investment plans are mutually interlinked and determined simultaneously, and in this sense the household is not independent of the business. Consequently, we aught to construct a theory to explain the behaviour of these households which is different from the one which explains the behaviour of the normal household".(Morishima, ibid, pp. 124-25)

"There are two ways of equating demand and supply: there is the method whereby prices are adjusted, and the method whereby the quantity of output is adjusted. If returns to the scale of output are diminishing with respect to the production of a certain good, its price will have to increase in order to increase the quantity of output; therefore, where there is an excess demand, adjusting by means of increasing output and adjusting by means of raising the price take place in parallel. However, where returns are constant with respect to scale, it is possible to leave price unchanged and adjust the quantity of output, and therefore demand and supply can be equated purely by regulating the quantity produced and without revising prices. Since returns to scale are constant chiefly in modern manufacturing industries, we can regard the area within which the equating of demand and supply is done by altering supply as widening with the development of these industries, and the regulating function of prices as having atrophied in the economy. It is very important to recognize this fact. Prices of products are determined according to the 'full-cost rule' or 'mark-up system' in modern manufacturing industries, and not in relation to the scarcity of the good. Consequently, even if the demand for a product increases, its price remains unchanged so long as wages and other costs do not rise, and excess demand is absorbed through expending output. But in industries with decreasing returns to scale (such as agriculture, certain small and medium scale enterprises, etc.), excess demand is eliminated by means of an increase in prices, which stimulates supply and at the same time reduces demand. Following Hicks, I have decided to call the former a fix-price economy and the latter a flex-price economy. Actual economies are neither pure fix-price economies nor pure flex-price economies but a mixture of the two." **(Morishima, ibid, p. 168-69**). It is worth investigating as to what are the proportions of such a mixture and which market is dominating. In whose favour are the terms of the trade and the like?

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