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DEVELOPMENT AND CHANGE IN A BENGAL VILLAGE

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and
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Research Report 20
Project on the Diffusion of Innovations
in Rural Societies

Cooperating Institutions:

National Institute of Community Development
Department of Communication, Michigan State University
Ministry of Food, Agriculture, Community Development
and Cooperation, Government of India
United States Agency for International Development

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PREFACE

This is a special anthropological report of the Diffusion of Innovations project which was undertaken in collaboration with Michigan State University. The senior author was a senior research fellow of the National Institute of Community Development while this project was undertaken. The junior author was on deputation from the Anthropological Survey of India. Other special reports focus on adoption of health practices, adoption of family planning, adoption of high yielding varieties, and on an analysis of opinion leadership in relation to the adoption of new practices.

Major reports of the project have been Agricultural Innovations in Indian Villages (NICD, March, 1968), an analysis of 108 villages, Agricultural Innovation Among Indian Farmers (NICD, May, 1968), an analysis of 680 Indian farmers; and Communication in India : Experiments in Introducing Change (NICD, May, 1968), a study of communication treatments in six villages.

Directors of the Diffusion of Innovations project were F.C. Fliegel, Prodipto Roy, J.E. Kivlin, L.K. Sen and J.P. Bebermeyer. Deputy Directors were A.K. Danda, S.K. Reddy and C.S. Thorat. Field investigations for this report were conducted by A.K. Danda and D.G. Danda. P.K. Chatterjee assisted with tabulation and analysis of data. The manuscript was typed by D.S.R. Anjaneyulu and G. Narayana Murty.

George Jacob
Dean
National Institute of
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Hyderabad
Dated 22nd May 1968

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INTRODUCTION

There is no society in the world that is fully static. The process of change is inevitable and all pervading. A change, however, does not always contribute to the benefit of a society. This is all the more so when the change is not properly planned.[1]

In the technologically developed countries the importance of planning is well recognised. There are also conscious efforts in these countries to control the forces of unplanned or spontaneous change and to adapt to planned change. In the underdeveloped part of the world, though the necessity for planned development has been duly recognised, until recently there have been no special endeavours toward directed change on a large scale.[2] In India, the first endeavour toward a nationwide planned development was recorded only after independence.[3]

This report presents a study of the process of planned change in a village of West Bengal[4], India.

There is a long tradition of village studies in India. Although systematic community studies did not appear until after World War II, village studies of various kinds have been pursued ever since the nineteenth century. They were conducted mainly by missionaries and British administrators. A majority of these studies were generalised descriptions of rural life. Some emphasised specific institutions, often

political or social, according to the interests of their authors.[5] The influence of nineteenth century evolutionary theory was reflected in a number of these works.[6] In the early twentieth century the studies tended to be more empirically oriented. Economic problems of rural India preoccupied many of these writers.[7]

As stated earlier, in India, as in other parts of the world, the major developments of community studies took place after the second world war. Social sciences were taught in some Indian Universities though as early as 1920 there was very little emphasis on the study of complex societies. To be more specific, Indian sociologists were in general not interested in emperical studies and Indian anthropologists were too much preoccupied with the vast aboriginal population of India[8] and did not regard the study of peasant societies as their proper domain. Thus the initial impulse for community studies in India came from the outside.

During and after World War II the United States Government became increasingly interested in area research and India began to draw attention of many American scholars. After the independence of India a number of foreign scholars and organisations -- both governmental and private -- became involved in India's rural development programmes. There was a coordinated effort on the part of the Government of India and foreign scholars, particularly those from the United

States and the United Kingdom to study Indian village communities. These studies were intended to provide a solid basis for the government's programmes of directed change. It was the convergence of this practical interest of the Indian government and the more academic interest of the foreign scholars which was largely responsible for the anthropological study of complex society in India.

The community studies in India which have been launched since World War II are of two different kinds. These were, on the one hand, intensive studies of specific institutions or problems of rural India. Many of these studies focused on change.[9] The other type of study was that of representative village communities. This was more in the nature of a survey and no special attention was paid to any particular aspect of village life.[10]

The present study differs in several respects from other community studies in India. First, while a considerable amount of descriptive ethnographical material is included, its primary focus is not on tradition but upon change. Secondly, the changes investigated are those resulting not from spontaneous cultural drift but from intensive and planned efforts of directed change.

Objectives of the study

There is a general agreement that the stepping up of agricultural production is one of the most difficult

challenges that India is facing today. This has been aptly realised by planners and the major emphasis of the community development programme in India has been on agricultural development. Though it was visualised that modernisation of agricultural techniques would bring about a revolution, the experiences of the extension workers in India were not always rewarding. Many programmes introduced by extension workers have been rejected outright by the farmers.

The present report endeavours to describe in general terms the various reactions of farmers in one village toward specific agricultural programmes. In this report, we have tried to find out to what extent and under what conditions the farmers in a community accept or reject an improved agricultural practice. The special emphasis of this report is to find out the causes of rejection. Once the reasons for non-adoption of recommended practices are established they could perhaps be remedied. There have been some attempts in this report to isolate the characteristics of adopters and innovations that influence adoption. If the characteristics of the adopters can be well established, the extension workers can be advised to contact those farmers who are potential adopters as it is not physically possible for them to contact each and every farmer. From the examination of characteristics of innovations we can sort out various factors that inhibit acceptance of a recommended practice. This knowledge can be utilised by the

extension agents before introducing any new practice.

We also tried to examine some aspects of the communication process of conveying modern ideas and practices to the villagers to see whether there is any predictable way in which the transferral process could be made more efficient.

More specifically, the objectives of this study were:

1. To describe by selected case studies within one village process of diffusion of a few agricultural practices and explain why certain practices are readily accepted whereas others are met with resistance.

2. To describe the characteristics of adopters and innovations and to examine how they can influence adoption of a recommended practice.

3. To examine to what extent the way in which change programmes are administered and executed might affect eventual success.

4. To generally describe what elements of community structure, clique membership, or factionalism facilitate or inhibit the diffusion of an improved practice.

5. To analyse the clique structure and communication channels of the village.

Some of these objectives were also part of Phase I and Phase II of the Diffusion of Innovations project.[11] The specific purpose of this sub-project was to complement

and supplement the sociological data with anthropological case descriptions in depth. In short, the present study aims at providing an understanding of the dynamics of the spread of improved practices and of specific reasons for their success or failure.

We have described the village and the villagers somewhat extensively. Particularly, our close observation of the way of life of the villagers for more than eight months led us to believe that it was important to obtain information on community structure.[12] The community structure was found to be one of the most important factors in shaping the individual and making him the kind of cultivator he is. It was also found to affect the degree of penetration of information at different levels.[13] Community structure will be discussed at some length in appropriate sections of this report.

We did not include a separate discussion of religion in the text of this report. This is not to deny the importance of religion in the adoption behaviour of individuals. On the contrary, we found religion to be an immensely important factor and most of the economic activities of the villagers were closely associated with it.[14] The limited scope of the present report does not permit a complete discussion on religious life of the villagers. This will be done in a separate publication.

Although certain recommendations for programme development have been incorporated in this report, the emphasis of our study was not on the formulation of programmes. In this report our chief aim was to locate the areas of village development that need careful observation and cautious handling.

Approach to the study

The village under study is one of the thirtysix villages of West Bengal that were covered by Phase I field work of the Diffusion of Innovations project. We were aware that no single village could possibly give us a sample of the total range of diversity found in West Bengal, much less that of India as a whole. "On the other hand, almost any village would serve our purpose as long as we knew what the village was typical of and what it was not typical of."[15] However, in the selection of the village its size, caste composition, communication system, innovativeness and the degree of representativeness of the village were taken into consideration.

For operational advantage we decided to select a village with 250 to 300 households. Also, in order to get a wide spectrum of adoption behaviour of different social groups we decided to select a heterogeneous village having representatives from fifteen to twenty castes.

In some of the thirtysix Phase I villages of West Bengal there were representatives of Muslim and tribal communities. So, for the purpose of comparability we decided to select a village that has some Muslim and tribal population. Some of the Phase I villages were very well developed and some were so inaccessible that they were as much as fifteen miles away from an all weather road. So, we decided to select a village that was neither on a metalled road nor too far from such a road.

In short, we wanted to select a village that would be within the limits of our resources for the purpose of the study and at the same time quite representative. Basudha[16] was selected for study because it was not very far from a city and yet it was not near enough to a city to be [illegible] a suburban extension. It was neither too large nor too small in respect of its area and population as compared to the villages in this part of the country and it was fairly representative in its ethnic composition and caste-constitution. The following table will show the representativeness of Basudha on a few selected characteristics, in comparison with thirtysix West Bengal, Phase I villages.

Table 1. Basudha Compared with Thirtysix West Bengal Villages.

	Thirtysix villages	Basudha
Per cent literate	24.6	34.16
Per cent tribal population	7.6	13.74
Per cent Muslim population	33.58	13.07

For collection of data all heads of the households were interviewed. In some cases we had additional interviews with persons who adopted some new practices or who tried some new practices and then abandoned them. Special interviews were also had with opinion leaders, innovators, and other categories of adopters.

The field investigation was carried out by a two-member field team consisting of a married couple, both of whom are anthropologists by training. That the field team was composed of a married couple helped to establish rapport with the villagers of Basudha.

Research procedure

Anthropological field techniques were utilised for collection of data with special emphasis on participant-observation method. For facilitating comparability with our larger studies, survey techniques were also utilised to a limited extent.

We lived in the village from June, 1967 to February, 1968. At first, the villagers were extremely suspicious about our stay there and the response of the village people was rather cold. They were overly alert to our presence and there were conscious efforts to hide things from us.

When we met an important formal leader of Basudha and explained to him our purpose of stay in the village, the

first thing he asked, "Is all this information that you want to collect confidential?" During our first week of stay in the village we were always asked, "What information do you want about the village? What will you do with it?" Though we tried to explain our purpose of stay in the village as best as we could, the villagers scarcely believed us. After our reply they would invariably say, "Only you know what you want to do." For sometime we got very little co-operation from them. Though we were extremely cautious in our dealings with the villagers there were occasions when we had to face unfriendly situation.

On one occasion we were stopped by an old woman of the village for interrogation. In spite of our best efforts to answer her questions satisfactorily, we found her careless in listening to our answers. She was primarily interested in humiliating us by irrelevant questions. It was not until we established personal relationship with the villagers that we got their acceptance and trust. For this, we had to identify ourselves with the villagers, move along with them in fields and markets, share their interest and concern, and live like them as much as possible.

To most of the villagers the purpose of our enquiry remained rather vague. To the villagers of India, in general, the idea of social research is still unfamiliar. They are familiar with the activities of the government officials

who move around the village with specific purposes, and the villagers can usually see immediately the result of their visit or enquiry. When we went to live in Basudha the villagers at first categorised us with other government officials and distrusted us as they do these officials. But when they found that our mode of enquiry was very different from other government officials they got scared. There were occasions when the villagers tried to give us fictitious information.

We bring forth all these discussions here as we feel that unless an investigator gets accepted by the villagers there is every possibility of getting misled by the answers of the villagers.

Although this work is based only in part on statistical enquiry, sufficient checks were used during the investigation so that we are satisfied with accuracy of our results. While in the field we took particular care against "interviewer's bias". Throughout the day we each gathered data in the village separately and then in the evening we discussed our experiences. Whenever we differed on a particular observation we checked it again and again until we came to an agreement. Thus we have confidence in the reliability of our information. We checked possible bias of the respondents by obtaining the same information from different individuals or sources, on different occasions and continued this process until we were satisfied that we had valid information.

FOOTNOTES

1. Sharp describes how indiscriminate introduction of steel axe by the white missionaries brought confusion and eventual disruption of social and cultural life of the Yir Yoront, an aboriginal tribe of Australia. See Sharp, Lauriston, "Steel Axes for Stone Age Australians," in Human Problems in Technological Change. by Edward H. Spicer (ed.). New York: Russell Sage Foundation. 1952: 69-90.

2. There were some limited attempts to plan for change during early periods in India. Some evidences of planning can be traced from the archaeological sites of Mohenjo-Daro and Harappa in what is now West Pakistan. There are also sporadic evidences of manipulated social change in later periods in India. See Mandelbaum, David G., "Planning and Social Change in India," Human Organization. Vol.12, No.3, 1953: 4-12.

3. Details of the national programme for planned development have been discussed in chapter V of this report.

4. The present study is part of a three-nation project, "The Diffusion of Innovations in Rural Societies," that comprises of studies in Brazil, India, and Nigeria. The project is being carried out under contract between the United States Agency for International Development and Michigan State University. Everett M. Rogers is the Project Director. The Indian portion of the study was

done in collaboration with the National Institute of Community Development, Hyderabad, India. We wish to acknowledge the critical comments of J.E. Kivlin in the writing of this report.

5. See Maine, Sir Henry Sumner, Village-Communities in the East and West, London: John Murray, 1871. Day, Reverend Lal Behari, Bengal Peasant Life, Calcutta: Orient Longmans, 1872. Grierson, Sir George Abraham, Bihar Peasant Life, Calcutta: Bengal Secretarial Press, 1885. Baden - Powell, B.H., The Indian Village Community, London: Longmans, Green, and Co., 1896.

6. See Maine, Sir Henry Sumner, op. cit. Also see Baden - Powell, B.H., op. cit.

7. See Darling, Malcolm, The Punjab Peasant in Prosperity and Debt, Bombay: Oxford University Press, 1925.

8. According to the 1961 census, the aboriginal population of India is 29,833,470.

9. Some of the important studies of this nature are: Bailey, F.G., Caste and the Economic Frontier: A Village in Highland Orissa, Manchester: Manchester University Press, 1957. Tribe, Caste, and Nation: A Study of Political Change in Highland Orissa, Manchester: Manchester University Press, 1960. Politics and Social Change, Berkeley and Los Angeles: University of California Press, 1963. Berreman, Gerald D., Hindus of the Himalayas, Berkeley:

University of California Press, 1963. Dube, S.C., India's Changing Villages, Ithaca, N.Y: Cornell University Press, 1958. For a detailed list of studies which focused on change, see Danda, Ajit Kumar, "Planned Development and Leadership in an Indian Village," Unpublished Ph.D. dissertation, Department of Anthropology, Cornell University, 1966: XIV.

10. The village studies undertaken by the Social Studies Section of the census organisation of India as part of the 1961 census are of this nature. More than eight hundred villages were studied. Although most of these studies are not very profound, the representativeness of the sample and the standardised approach that was utilised have produced kinds of data that may serve as the basis for a typological classification of villages in different parts of India. This representativeness and standardised approach may also provide a useful antidote to the unbalanced distribution of community studies in India, the locale of which has been determined primarily by the interests of individual scholars or the chance opportunities that fell their way.

11. See Fliegel, Frederick C., Prodipto Roy, Lalit K. Sen, and Joseph E. Kivlin, Agricultural Innovations in Indian Villages, Hyderabad: National Institute of Community Development, 1968. Also see Roy, Prodipto, Frederick C. Fliegel, Joseph E. Kivlin and Lalit K. Sen, Patterns

of Agricultural Diffusion in Rural India, Hyderabad: National Institute of Community Development, 1968.

12. Dasgupta, quoting the renowned poet and pioneer in rural reconstruction Tagore, commented that in his task of rural reconstruction Tagore also "... sought to achieve this end by establishing a close acquaintance with the problems of the village at a human level .... Its problems," Tagore maintained, "had accordingly to be analysed not in terms of statistics only, but by establishing a creative and insightful acquaintance with the village social structure." See Dasgupta, Sugata, "Social Change in a Village in West Bengal," in Problems of Rural Change, by M.S. Gore (ed.). Delhi: Delhi School of Social Work, 1963: 147.

13. See Fliegel, et al, op. cit., Ch.6, for an analysis of structure in 108 villages.

14. For details of economic activities round the year see Appendix A.

15. Lewis, Oscar, Village Life in Northern India, New York: Alfred A. Knopf, Inc. and Random House, Inc., 1965: X. Lewis maintains that "... communities give us some cell-like minimal duplication of the basic cultural and structural whole, especially in a peasant country like India" (Ibid.). Arensberg and Kimball maintain that "Community study is that method in which a problem

(or problems) in the nature, interconnections, or dynamics of behaviour and attitudes is explored against or within the surround of other behaviour and attitudes of the individuals making up the life of a particular community. It is a naturalistic, comparative method. It is aimed at studying behaviour and attitudes as objects in vivo through observation rather than in vitro through isolation and abstraction or in a model through experiment." See Arensburg, Conard M. and Solon T. Kimball, Culture and Community, New York: Harcourt, Brace & World, Inc., 1965: 29.

16. The name Basudha is fictitious.

...

PART ONE: THE PHYSICAL SETTING

C H A P T E R I

BACKGROUND OF THE VILLAGE

Basudha is a relatively large village with a population of 1,595. The village is situated in Burdwan, a district[1] in the state of West Bengal, India. The district lies in the south-eastern portion of the vast Gangetic plain that covers most of the areas of West Bengal and Bihar. The approximate latitude and longitude of the village are 23° 50' North and 87° 65' East respectively.

Early history of the village

Basudha is inhabited by sixteen Hindu castes, and also by Muslims, and Santals, a tribal community. The available historical record of the village is barely sufficient to give a detailed account of its origin and growth. As far as it could be traced, originally the Muslims of a nearby village were the *ayemaadaar*[2] of Basudha and the present Sadgope[3] *zamidaar*[4] were their *gomostaa*.[5] At that time there were only three Sadgope families, one Namosudra family, one Bagdi family, one Bostom family, and one Muslim family in the village. About 350 years ago the Muslim *ayemaadaar*, because of an internecine quarrel, started selling property which was bought mostly by their Sadgope *gomostaa*. Thus within a short period the former *gomostaa* became the zamidaar of the *mouzaa*[6],

and migrated to Basudha from their original village of Mangalkote Police Station of the same district. This happened about 300 years ago.

When the Sadgope zamidaar migrated to Basudha they brought their domestic deity, Dharmaraj, along with them and established him here. The zamidaar set aside about five acres of cultivable land for the maintenance of Dharmaraj temple and daily worship there. The Dharmaraj is still the most important deity of the village.

When the first zamidaar family migrated to Basudha there was no Brahman in the village. As the presence of a Brahman was indispensable to act as a priest for the daily worship of Dharmaraj, a Brahman family was brought to Basudha from a nearby village under the patronage of the zamidaar. This was about 200 years ago. Then followed the migration of service castes[7] such as Napit (barber), Kalu (oil presser), Karmakar (blacksmith) and Moyra (confectioner) to Basudha from the nearby villages. Castes like Dome and Bauri who now work as agricultural labourers at Basudha were also later immigrants. They came both from within the district and from one of the neighbouring districts of Burdwan. The Mogheya Dpmes, Santals, and Ranakarmakars were the last three groups to arrive. Almost all of them came from outside the state of West Bengal. While the former two groups now work as agricultural labourers the Ranakarmakars still follow

their caste occupation, which is smithery of iron.

Climate

The climate of the area is monsoonal. Usually the monsoon arrives in this region at the middle of June and continues till the end of September. During this period the humidity and temperature are quite high and the area experiences intermittent rainfall. When the monsoon retreats the temperature also falls and the climate becomes very pleasant. The nights from the middle of October to February are quite cool. During this period the village roads become very dusty. Once in a while in the winter it rains and then the dust settles down for a day or two.

Transport and communication facilities

From the district headquarters of Burdwan the village is about 17 miles toward north. The communication system is moderately developed in this area. Burdwan -- Suri road that runs from south to north passes along one mile east of the village. An all weather gravelled road[8] connects the village with Burdwan -- Suri road where buses for Burdwan and Guskara[9] are available about every half an hour. A broad-gauge track of the Eastern Railway, the Sahibgunj Loop, passes through Basudha, and there is a small railway station just at the outskirts of the village. It is a crossing station built only in order to facilitate movements of through trains, so no commercial booking facilites are available here.

Though the nearest railway station from Basudha, where commercial booking is available, is only about 3.5 miles south, the villagers seldom use that station as there is no direct road to get there. They use either Guskara or Burdwan Railway Station where they can go easily by bus.

In addition to these means of transporation there is a network of bullock cart paths that links Basudha with the neighbouring villages. For inter-village communication the villagers mostly depend on bullock carts. These are also used for carrying goods and agricultural commodities from one place to another. Bicycles are also largely used as a means of transport by the villagers.

The post office under whose jurisdiction Basudha is situated is about a mile and a half away from the village. But the villagers very seldom visit this post office. They prefer to go to the post office that is situated just beside the nearest marketing centre[10] of the village. The villagers do not take any extra trips to visit the post office. They usually come to the marketing centre for daily shopping and when required they visit the post office. For sending a telegram the villagers have to go up to Guskara where the nearest telegraph office is situated.

Residences

Basudha may be called a nucleated[11] village. Most of the houses are huddled together around three sides of a large

pond, locally called dighii. Trees, orchards, and ditches separate the inhabited area from the agricultural fields. There are three paarahaa[12] (section) in the village named according to their location around the pond. The northern section is inhabited mainly by the members of Sadgope caste. This is also the seat of the most powerful zamidaar of the village.[13] The eastern section is inhabited by the members of Bostom, Brahman, Bagdi, Dome, Napit, and Sadgope castes. The other zamidaar family lives here. The western section is mainly occupied by the Bagdi and Muslim. In addition the Gandha Banik, Namosudra and some Sadgope families also live here.

Both old and new types of houses are seen in Basudha. Most of the old houses are mud-built. At present, those who can afford it construct brick houses.

Differences are observed in residential styles of the villagers of Basudha. These are mostly based on the economic, educational, and political status of the house owner. However, as the differences across the caste are more distinct than the differences within the caste each paarahaa has its characteristic appearance.

Population

Table 2 gives the distribution of population of Basudha, according to caste[14] and sex. The Sadgope are the dominant caste of the village.[15] According to Bailey's terminology[16] they form the modern as well as thetraditional dominant

caste of Basudha. Sadgope, Bauri, Muslim, Bagdi, and Santal form the major caste or religious groups of the village. Each of the other castes are represented by only a few members.

Table 2. Population Distribution of Basudha according to Caste and Sex.[17]

Cast	Male	Female	Total
1. Bagdi	88	94	182
2. Bauri	118	143	261
3. Bostom	9	13	22
4. Brahman	3	11	14
5. Dome	16	27	43
6. Gandha Banik	4	3	7
7. Kalu	2	2	4
8. Karmakar	7	7	14
9. Kayastha	4	4	8
10. Mogheya Dome	20	20	40
11. Moyra	2	3	5
12. Muslim	98	103	201
13. Namosudra	17	18	35
14. Napit	4	5	9
15. Ranakarmakar	3	3	6
16. Sadgope	256	289	545
17. Santal	85	86	171
18. Sunri	13	15	29
Total:	749	846	1595

The table reveals that in Basudha females have a preponderance over the males which is in contrast with the all India sex-ratio.[18] What is more striking here is that except the Gandha Banik caste, that is represented by only one family, in all the other castes the number of females is either equal to or more than the number of males. One possible explanation of this uneven sex-ratio could be the existence of a large number of widows at Basudha, particularly among the upper Hindu castes.[19] But the larger number of females among the Muslims and Santals who have practically no widows among them make this argument vulnerable to criticism. The second possible explanation could be the higher survival value of female children. But our data on infant mortality reveal that the number of female children died is proportionately larger than the number of deceased male children. As for example, among the Bauri of Basudha altogether 48 children died during the last twenty years. Out of them there were only 15 male children; the remaining 33 were female children. Though there are some women among the lower castes who have been deserted by their husbands, this phenomenon does not explain why there should be more women among the upper castes as well. However, as we cannot put forward any suitable explanation for the disparity in sex-ratio in Basudha it can be considered as a queer statistical assortment.

Table-3. Age Group Distribution.

Caste	0 - 5		6 - 16		17 - 55		56 and over		Total	
	M	F	M	F	M	F	M	F	M	F
Dagdi	17	19	26	26	41	44	4	5	88	94
Bauri	24	33	33	43	52	61	9	6	118	143
Bostom	3	2	3	6	3	4	0	1	9	13
Brahman	0	2	1	4	2	4	0	1	3	11
Dome	4	9	1	4	11	11	0	3	16	27
Gandha Banik	0	0	2	2	1	1	1	0	4	3
Kalu	0	0	1	0	0	1	1	1	2	2
Karmakar	1	2	2	1	3	3	1	1	7	7
Kayastha	1	1	2	1	1	2	0	0	4	4
Kogheya Dome	2	2	7	7	10	11	1	0	20	20
Moyra	1	1	0	0	1	2	0	0	2	3
Muslim	21	29	27	28	45	39	5	7	98	103

Contd....

Table 3 contd.

Caste	0 - 5		6 - 16		17 - 55		56 and over		Total	
	M	F	M	F	M	F	M	F	M	F
Namosudra	4	5	5	4	7	7	1	2	17	18
Napit	0	1	1	1	2	3	1	0	4	5
Ranakarmakar	0	1	1	0	2	2	0	0	3	3
Sadgope	46	58	90	108	105	102	15	21	256	289
Santal	23	21	19	23	41	40	2	2	85	86
Sunri	1	2	5	5	7	7	0	1	13	15
Total:	148	188	226	263	334	344	41	51	749	846

Table 3 describes age group distribution of the population of Basudha according to caste and sex. The age group categories of this table do not follow the age group categories of the Census of India. The argument in support of the age group categories of this report is that from close observation it was found that six to sixteen is the school going age for the children of this village and seventeen to fiftyfive is the age group of the working population. So, in order to facilitate our discussion on literacy and working - nonworking group, we made these operational age group categories. The table reveals that twenty-one per cent of the total population of Basudha belongs to pre-school age, 30.65 per cent belongs to school going age and the proportion of working population is 42.56 per cent of the total.

Literacy

Table 4 depicts literacy in the village. Of the total population of Basudha 34.16 per cent are literate.[20] If we exclude children of pre-school age from the total, the proportion of literates of the village comes to 43.23 per cent. Though most of the literates are either school going or have completed primary education only, the percentage is considerably above district, state, and union averages (for comparison vide table 5). There is no marked difference in the percentages with primary level education between the sexes. But at the secondary level, out of a total of 169 only 23.55 per cent are female. The percentage goes down further

when we take post-matric and the graduate level of education into consideration.

There is a primary school within the village. Both boys and girls of Basudha can attend it without much difficulty. Therefore there is no marked difference in the proportion of school going children of the two sexes at the primary level. The poor representation of females at the secondary level of education could be attributed to several causes. As the overall standard of literacy in the village is not very high, the girls who have primary education are considered as sufficiently literate and the villagers put less emphasis on their higher education. Apart from this, quite a few villagers think of expenses on girls' higher education as a waste because they will move to their husbands' place when they get married and will never utilise their knowledge.[21] Another reason that prevents girls from going for higher education is that girls, even when they are young, share some of the burden of domestic responsibilities of their mothers. When they complete their primary education, the mothers often engage them with full time domestic duties. This is, on the one hand, to reduce the burden of their mothers, and, on the other hand, to educate the girls in sharing domestic responsibilities. Early marriage is the local custom and mothers feel obligated to train their girls in domestic duties before they get married.

Table 4. Literacy and Education in Bandha.

	Illiterate		Primary I to IV		Secondary V to XI		Undergraduate		Graduate		Total	
	M	F	M	F	M	F	M	F	M	F	M	F
Bagdi	83	94	5	0	0	0	0	0	0	0	88	94
Bauri	109	142	7	0	1	1	1	0	0	0	118	143
Bostom	3	5	3	8	3	0	0	0	0	0	9	13
Brahman	0	5	1	3	1	3	1	0	0	0	3	11
Dome	15	26	0	1	1	0	0	0	0	0	16	27
Gandha Banik	0	1	3	2	1	0	0	0	0	0	4	3
Kalu	0	2	1	0	1	0	0	0	0	0	2	2
Karmakar	1	4	3	3	3	0	0	0	0	0	7	7
Kayastha	1	2	2	2	1	0	0	0	0	0	4	4
Mogheya Dome	19	20	1	0	0	0	0	0	0	0	20	20
Moyra	1	2	1	1	0	0	0	0	0	0	2	3
Muslim	50	82	31	19	17	2	0	0	0	0	98	103
Namosudra	6	14	6	3	4	1	1	0	0	0	17	18

Contd....

Table 4A contd.

	Illiterate		Primary I to IV		Secondary V to XI		Undergraduate		Graduate		Total	
	M	F	M	F	M	F	M	F	M	F	M	F
Napit	1	4	2	1	1	0	0	0	0	0	4	5
Ranakarmakar	2	3	1	0	0	0	0	0	0	0	3	3
Sadgope	50	131	101	125	88	32	14	1	3	0	256	289
Santal	76	86	7	0	2	0	0	0	0	0	85	86
Sunri	1	9	7	5	5	1	0	0	0	0	13	15
Total:	418	632	182	173	129	40	17	1	3	0	749	846

Table 5. Comparison of Literacy in Basudha with the Union, State, and District.

	Total percentage of literate	Percentage of literate among male	Percentage of literate among female
India	24.0	34.0	13.0
West Bengal	29.3	40.0	17.0
Burdwan	29.6	39.0	18.0
Basudha	34.16	44.19	25.29

It may be worthwhile to mention here that among the Bagdi, Mogheya Dome and Ranakarmakar none of the women are literate. However, when we consider the different caste groups and take both males and females into consideration, we find that the Bagdi, Bauri, Dome, Mogheya Dome, Ranakarmakar, and Santal, who occupy low position in the caste hierarchy, have proportionately smaller number of literates. Those who occupy higher position in the caste hierarchy, viz. Brahman, Kayastha, Sadgope, etc. have proportionately larger number of literates.

Schools

The free primary school of Basudha is one of the oldest educational institutions of this locality. According to a teacher of the school it was established around 1880 under the patronage of the zamidaar of the village. At present the school is run by the District School Board, Burdwan, and it has recently been upgraded up to the fifth

standard or year of schooling. There is no high school within the village, but there are two of them within one mile of the village and both of them are attended by almost equal number of students from Basudha. The nearest college for higher education is situated at Guskara, about six miles away from the village, and a few students of Basudha attend this college.

Health Centres

The medical facilities of the village are rather backward. The nearest primary health centre is about sixteen miles away and the villagers seldom go there. They sometimes visit the subsidiary health centre at Guskara that provides hospitalization facilities as well. However, a major portion of their medical needs are provided by two quack doctors who have dispensaries within one mile from the village.

Public buildings and offices

The people of Basudha have few banking transactions and those are chiefly with the village cooperative society. However, commercial banking facilities are available at Burdwan. The police station under which the village is situated is about sixteen miles away. There is a sub-police station at Guskara that ordinarily serves the purposes of the villagers. The block development office, anchal panchayat (regional council) office, veterinary dispensary[22], and the

nearest cinema hall are also situated at Guskara and the villagers visit these when required. The office of the village level worker is situated within a mile and a half from Basudha but the villagers very seldom visit that office. An average villager has practically no contact with the village level worker, who usually visits Basudha about once every fortnight.

Though there is a gram panchayat (village council) office in the village there is no separate structure to house it. The adhyaksha (head) of the village council keeps the official files and records in his own house. However, when it becomes necessary to have a meeting of the executive committee of the village council or a general meeting of the gram sabha (village assembly) the botkhaanaa[23] of the zamidaar of Basudha is used for the purpose.

Of all public buildings of the village the library-cum-club house and Dharmaraj temple are most important. The library-cum-club house is the youth organization centre of Basudha and the Dharmaraj temple, in addition to its importance as the most important religious centre of village, provides the stage for performance of folk drama. Besides these there are three temples of Shiva, one mosque, and eight minor shrines in the village that belong to the members of different castes. The shrines, though not very

important as far as their physical structures are concerned, have each a reasonable number of followers and are regularly visited by people from one or the other section of the village.

Economic resources

Subsistence agriculture is the mainstay of the economy of the village of Basudha. Out of a total of 334 males who belong to the age group of seventeen to fiftyfive and whom we can consider as the main labour force, 94.31 per cent are engaged either in agriculture or in allied jobs. Among the females, though a large number declared themselves as housewives (vide table 6), a majority of them, particularly those who belong to the lower castes, do some kind of agricultural job. However, as it is not a regular employment, this has been declared as a subsidiary occupation by them.

Table 6 shows that there are fortysix individuals in Basudha who are engaged in outside employment. All of them are engaged in non-agricultural jobs. They mostly work in the industrial and commercial undertakings of the neighbourhood.

There are 562 individuals in the village who do not practise any economic pursuit. Most of them are children below six years. Some elderly people and invalids are also included in this group.

Table 6. Occupational Distribution by Caste.

Caste	Farming	Share-cropping	Outside employment	Farm servant	Domestic servant	Wage labourer	Student	Housewife	None	Total
Bagdi	1	2	1	41	2	15	0	42	78	182
Bauri	0	7	2	37	8	30	3	51	123	261
Bostom	2	0	1	0	0	1	7	4	7	22
Brahman	2	0	0	0	0	0	5	4	3	14
Dome	0	0	3	7	1	1	0	13	18	43
Gandha Banik	2	0	0	0	0	0	2	2	1	7
Kalu	2	0	0	0	0	0	1	1	0	4
Karmakar	0	0	3	0	0	0	4	4	3	14
Kayastha	1	0	0	0	0	0	3	2	2	8
Mogheya Dome	0	0	0	9	0	4	1	9	17	40
Moyra	0	0	1	0	0	0	1	2	1	5

Contd....

Table 6. contd.

Caste	Farming	Share-cropping	Outside employment	Farm servant	Domestic servant	Wage labourer	Student	Housewife	None	Total
Muslim	25	9	4	5	0	5	30	49	74	201
Namosudra	6	1	1	9	0	0	6	9	12	35
Napit	1	0	2	0	1	0	1	3	1	9
Ranakarmakar	0	0	2	0	0	0	2	1	1	6
Sadgope	87	0	25	0	0	1	190	111	131	545
Santal	0	35	1	6	0	1	1	42	85	171
Sunri	6	0	0	0	0	0	9	8	5	28
Total:	135	54	46	105	12	68	266	357	562	1595

Table 7. Distribution of Village Land According to Caste.

Caste	Amount of land owned (in acres)	Percentage of total land owned	Fragmentation (No. of non-contiguous plots)	No. of families owning the land	Average land holdings per family by caste (in acres)
Bagdi	1.45	0.95	12	10	0.145
Bauri	0.00	0.00	0	0	0.000
Bostom	2.03	1.33	6	3	0.677
Brahman	7.17	4.70	27	2	3.585
Dome	0.16	0.10	3	4	0.040
Gandha Banik	2.48	1.63	3	1	2.480
Kalu	0.38	0.26	5	1	0.380
Karmakar	2.06	1.35	17	1	2.060
Kayastha	0.07	0.05	2	1	0.070
Mogheya Dome	0.00	0.00	0	0	0.000
Moyra	0.00	0.00	0	0	0.000
Muslim	10.79	7.07	55	28	0.385

Contd....

Table 7. contd.

Caste	Amount of land owned (in acres)	Percentage of total land owned	Fragmentation (No. of non-contiguous plots)	No. of families owning the land	Average land holdings per family by caste (in acres)
Namosudra	0.56	0.36	9	4	0.178
Napit	0.87	0.57	3	2	0.435
Ranakarmakar	0.00	0.00	0	0	0.000
Sadgope	116.12	76.11	377	61	1.904
Santal	1.10	0.72	4	10	0.110
Sunri	7.34	4.81	8	4	1.835
Total	152.57	100.00	531	132	

As far as the total amount of land is concerned, Basudha is a small village with a total area of only 239.95 acres. Out of this total amount of land 85.51 acres are occupied by the Railway authority and the Damodar Valley Corporation (the canal authority). Of the remaining 152.57 acres of village land, 139.32 acres are cultivable area and 13.25 acres are habitation area.

It was extremely difficult to make an accurate assessment of land ownership of the village. After a long endeavour we could make more or less accurate assessment of the 152.57 acres of village land in private hands. No record could be traced for the remaining 1.87 acres of land.

Table 7 gives distribution of village land according to caste. From the table it is seen that 76.11 per cent of the village land is owned by 34.16 per cent of the villagers, that is by the members of the Sadgope caste. There again the lion's share (i.e. 40.53%) is obtained by the two zamidaar families. Members of the Bauri, Mogheya Dome, Moyra and Ranakarmakar castes do not own any land.

The figures of table 6 are to some extent deceptive as many of the villagers own land outside the village area.[24] However, the patterns of distribution of the ownership of land by different castes are more or less representative. As far as the sources of irrigation are concerned, the villagers mostly depend on a canal and the ponds in the village. Recently,

a diesel irrigation pump has been bought by one of the villagers which is used to lift water from the village ponds. There is no electricity in the village. Out of the total village land, 116.00 acres are under canal irrigation and 30.84 acres are under pond irrigation. The area of land under pond irrigation is a double cropped area. This is locally known as do land.

The heads of cattle almost equal the number of individuals in the village. There are 1517 heads of cattle in Basudha, of which there are 289 bullocks, 155 buffaloes and 1173 cows and calves. The bullocks and buffaloes are used as draft animal for the cultivation of land and for bullock carts. As stated earlier, the bullock carts are the primary means of transport in the area. There are 120 of them in the village. There are also seventy bicycles at Basudha that are used for transportation purpose. The bicycles are used for personal use whereas bullock carts are sometimes used on hire also. The Muslims, particularly, supplement their income by lending their bullock carts on hire.

In our description so far we have narrated the background of the village in general terms and with specific reference to its climatic condition, transportation and communication facilities, institutions, and economic resources. Each of these factors can separately or together influence

adoption behaviour of the villagers.[25] Some of the important factors of these will be discussed in detail in appropriate chapters of this report.

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FOOTNOTES

1. Administratively each state is divided into a few divisions and each division, in its turn, is divided into several districts. A district usually comprises an administrative and revenue unit in charge of a District Magistrate and Collector.

2. Muslim scholars who were rewarded tax free land by the Muslim emperors in recognition of their merit in preaching and scholarship.

3. It is the name of a caste in West Bengal that practises agricultural farming as its livelihood.

4. The nearest English equivalent is landlord. A zamidaar is a person who possesses some landed property and is responsible to the government for the tax of the land under his jurisdiction.

5. It is originally a Persian word largely used in Bengali. It means rent collector.

6. It is originally an Arabic word, literally means village. A mouzaa refers to a habitation area and its surrounding cultivable lands.

7. According to Hindu caste system almost all the castes have their specific professions or occupations to follow. Castes that follow such occupations as barber, oil extractor and confectioners, are usually referred to as service castes.

8. The road is known as G.B. Ghosh road. G.B. Ghosh was the father of Shaktipada Ghosh, a present villager of Basudha and was the president of the local union board for 30 years. During his life time he took initiative to construct this road. But due to lack of funds the construction was delayed. After his death construction of this road was undertaken as a community development project. Shaktipada Ghosh at that time donated Rs. 2,000 for the construction of this road. As a result of the joint effort of the community development project and the villagers of Basudha the road was constructed and named after the father of Shaktipada Ghosh. Though ordinarily the road should be maintained by the local anchal panchayat or regional council (second tier from the bottom of the four tier panchayati raj system of West Bengal) this road is maintained by the gram panchayat (village council) of Basudha. As the villagers took special interest in the construction and maintenance of this road, by a special arrangement, the responsibility was vested in them.

9. Guskara is an important commercial and urban centre of this locality. It is about six miles north of the village.

10. There are five grocery stores in the village where petty shopping could be done. But each of them is very poor in stock and the major transactions made there are on the basis of barter system. Usually daily wage labourers come

to these stores to buy their commodities in exchange of rice that they earn as part of their salary. The farmers in general visit the nearest marketing centre at Orgram or the weekly market at Guskara for regular shopping.

11. A village that has a central settlement area surrounded by agricultural fields. In the strict sense of the term Basudha cannot be called a nucleated village as the settlements of the Bauri and Santal are a little away from the main inhabited area and there are agricultural fields in between. Technically the Bauri settlement does not belong to the mouzaa of Basudha. As it forms a part of the Basudha Gram Panchayat in this report the settlement has been treated as a part of Basudha.

12. A separate section or quarter of a village in which members of a certain caste normally are concentrated.

13. At present there are two zamidaar families in Basudha.

14. Though the Muslims and Santals of the village do not necessarily belong to Hindu caste system, for our operational advantage they have been treated as castes here. The position of Muslim in the Hindu caste system is somewhat capricious, but the Santal, with the exception of their tribal origin and somewhat distinct way of life, can for all practical purposes be treated as members of the Hindu caste system.

15. See Srinivas, M.N., Caste in Modern India and Other Essays, Bombay: Asia Publishing House, 1962: 89-93.

Also see M.N. Srinivas, "The Dominant Caste in Rampura," American Anthropologist, Vol.61, No.1, 1959: 1-16.

16. See Bailey, F.G., Tribe, Caste and Nation, Manchester: Manchester University Press, 1960: 257-263.

17. The table represents figures of the village population in 1967, on the basis of our own enumeration.

18. According to Census of India, 1961, there were 226,293,201 males and 212,941,570 females in India, the sex-ratio being 941 females for every 1,000 males. In West Bengal the number of males and females were 18,599,144 and 16,327,135 respectively and the sex-ratio is 878 females for every 1,000 males. In Burdwan district the sex-ratio is 858 females for every 1,000 males and there were 1,658,976 males and 1,423,870 females. The sex-ratio of Basudha is 1130/for every 1,000 females.

19. On the basis of the rules of untouchability and commensality the Hindu castes can be arranged in a hierarchical order. Ordinarily castes that occupy higher position in that order are referred to as upper castes. Similarly castes of lower rank are referred to as lower castes.

20. One who has some elementary schooling and is able to sign his initial is considered a literate.

21. Damle describes how inadequacy of social structure can prevent modern ideas and knowledge from bearing a functional relationship to the system. In Basudha the

education of females is considered functional up to the primary level. According to local custom it is dysfunctional at the secondary level and onwards. Compare Damle, Y.B., Communication of Modern Ideas and Knowledge in Indian Village, Cambridge, Massachusetts: Center for International Studies, Massachusetts Institute of Technology, 1955: 10 and 21.

22. For common diseases of cattle the villagers consult a herbalist of the neighbouring village who attends the call free of charges. Only in case of difficult labour and epizootic diseases do they take help of the veterinary dispensary.

23. The nearest English equivalent of botkhaanaa would be drawing room. It is a corrupt form of the original Bengali word baithokkhaanaa.

24. All together the villagers of Basudha own 621.60 acres of land. So, the average area of land per family is 2.196 acres.

25. These have been discussed somewhat extensively in Phase I and Phase II reports of the Diffusion of Innovations project in India, of which the present study is a part. See Fliegel, Frederick C., Prodipto Roy, Lalit K. Sen and Joseph E. Kivlin, Agricultural Innovations in Indian Villages, and Roy, Prodipto, Frederick C. Fliegel, Joseph E. Kivlin, Lalit K. Sen, Patterns of Agricultural Diffusion in Rural India, Hyderabad: National Institute of Community Development, 1968.

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PART TWO: COMMUNITY STRUCTURE

CHAPTER II

SOCIAL LIFE

The population of Basudha can, on the basis of religion, be divided into two groups: the Hindus and the Muslims. There is a third group, the Santals, who have a tribal origin but despite their independent ritual system they tend to function as members of a lower Hindu caste and declare themselves as Hindus and we will generally regard them as such. The Muslims, on the other hand, not only have an independent ritual system, but in many areas of their social and cultural life they function as a distinct group. So they do not exactly fit into the Hindu caste hierarchy.

The Hindus of Basudha are subdivided into multiple endogamous castes. Although the Muslims differentiate themselves on the basis of aristocracy,[1] they form a more or less homogeneous group as far as their way of life is concerned. Their rules of endogamy and commensality also make the Muslims a distinct group from the Hindus.

On the basis of their respective hierarchical positions the seventeen Hindu castes of Basudha can be broadly classified into three segments. Table 8 presents the approximate position occupied by different castes. The upper segment

is occupied by the Brahmans, Kayasthas, Sadgopes, Gandha Baniks and Karmakars and the top most position in the upper segment is occupied by the Brahmans. The Kayasthas occupy the second highest position. Although hierarchically the last three castes occupy the same position, they are quite distinct in other respects. The members of these five castes together are known as bhadralok[2] (gentlemen or upper caste), in opposition to the lower segment known as chhotalok[3] (lower caste).

Table 8. Hierarchical Order of Different Castes in Basudha.

Upper Segment	Brahman
	Kayastha
	Sadgope, Gandha Banik, Karmakar
Middle Segment	Bostom
	Kalu, Moyra, Napit
Lower Segment	Sunri, Namosudra
	Bagdi
	Dome
	Ranakarmakar
	Bauri
	Mogheya Dome
	Santal

The middle segment is occupied by the Bostom, Kalu, Moyra, and Napit castes. They have rather a marginal[4] position in the hierarchical polarity of the bhadralok and chhotalok. Out of these four castes, the Bostom occupy the highest position. Kalu, Moyra, and Napit are more or less parallel in the caste hierarchy, though otherwise they are quite distinct.

The lower segment is formed by the Sunri, Namosudra, Ranakarmakar, Bagdi, Dome, Bauri, Mogheya Dome, and Santal castes. As stated earlier, the members of these castes are broadly referred to as chhotalok. Some of them may be called untouchables in Basudha, that is they are usually not allowed to sit with or touch persons of clean[5] castes. Some concessions in this respect are made as far as the members of Sunri and Namosudra castes are concerned. They are not treated as untouchables. However, according to caste rules they are not permitted to offer drinking water to a Brahman.[6] Among the chhotalok they occupy the top-most position in the caste hierarchy and they are not really looked down upon as much as the members of other chhotalok castes. This is partly because the Sunris own substantial landholdings and the Namosudras are well advanced in literacy and also have some landholdings.

The positions occupied by different castes are on the basis of the ceremonial and secular values of the village as a whole. As the values sometime conflict, there is some possibility of regrouping the castes in a different set up. In Basudha, while there is no dispute about grouping castes into broad categories of bhadralok and chhotalok, there is a considerable amount of disagreement among the villagers themselves about their respective positions within these categories, particularly within the cluster of chhotalok. For example, members of both Bagdi

and Dome castes consider each other inferior. However, the general consensus of the village is in favour of the Bagdi caste being superior in status (vide table 9)[7].

Table 9. Over-all Caste Ranking in Basudha.

Rank Occupied by Various Castes	Name of Castes
1	Brahman
2	Kayastha
3	Bostom
4	Sadgope
5	Karmakar
6	Gandha Banik
7	Moyra
8	Muslim
9	Napit
10	Kalu
11	Sunri
12	Bagdi
13	Dome
14	Namosudra
15	Ranakarmakar
16	Bauri
17	Mogheya Dome
18	Santal

A description of the approximate place occupied by the members of various castes in the social system of Basudha and their respective occupations have been enumerated below:

Brahman

Ritually, Brahmans occupy the highest position in the village as elsewhere in India. In economic status in Basudha they rank below the Sadgope. Traditionally they should follow the occupation of priesthood. In Basudha the two Brahman families practise both priesthood and farming. The standard of literacy among the Brahmans of this village is quite high and they also have a reasonable amount of landholdings. Over and above this, because of their priestly occupation they enjoy an esteemed position in Basudha.

In spite of this seemingly privileged position, the Brahmans of Basudha are not very happy. According to one member of the Brahman caste of Basudha, "Formerly nobody ever ate anything without giving the first portion to the Brahman. The Brahmans had respect and the profession of priesthood was economically sound. Now nobody cares to know whether a Brahman ate or remained unfed. Most of the people think that expenses on religious rites and worships are sheer waste. Offering of worships has become a mere ritual now. People do not have a heart in it. The relationship that a Brahman had with his clients does not exist anymore."

The job of a Brahman priest has become very difficult in Basudha following factionalism in the village.[8] As they had to be the allies of the village zamidaar in the village factions, they lost a large number of clients and a considerable amount of prestige. "As we are economically tied up with

the zamidaar we had to side with them. This made us unpopular among members of the other faction," said a Brahman priest. "I know, people expect an impartial role from the priest. But how could we keep from obliging the zamidaar?" he added. Apart from factionalism, people's attitudes toward religious rites have also, to some extent, changed. As a member of the Sadgope caste observes, "When my mother was alive she would always send the first fruit or vegetable of our farm to the Brahman. We never ate anything before giving the Brahman a portion of it. After my mother's death, we followed this practice for two or three years. Then we stopped sending anything. We know that worship is something religious to us but to a Brahman it is nothing but a way of earning his bread."

Though the above comment implies a shift of emphasis from traditional religious behaviour, the Brahman still plays a major role in the everyday life of the villagers, and on almost all religious occasions they employ a Brahman.

The Brahman who acts as a priest is expected to follow certain ritual obligations. They are not allowed to perform any worship unless they are ceremonially clean. On the occasion of any worship they are expected to observe fast, wash themselves properly, and in personal matters are expected to maintain strict sanctity.

Unlike Brahmans in most other parts of India, the Brahmans of Bengal can eat fish and meat without defiling themselves but they cannot drink any alcoholic beverages

and are supposed to observe the rules of purity prescribed for the Brahman. There are two Brahman families in Basudha.

Kayastha

In ritual status the Kayastha occupy the second highest position in the village. They do not wear a sacred thread as the Brahmans do, nor do they observe the rules of ritual purity prescribed for the Brahmans. But they strictly observe the rule of commensality and ritual purity as are prescribed for them. The Kayasthas do not eat cooked food in the house of a person who belongs to a lower ritual status. They are not supposed to drink water from the hands of the chhotalok either. There is one Kayastha family in the village which is not economically very well off but their superior caste position is never denied.

According to caste occupation, the Kayasthas are scribes. They have a long tradition of having worked as literary men. When the English education began in Bengal, the Kayasthas quickly adjusted to the new system and entered in large numbers into different professions and ranks of government services. Until recently theonly adult Kayastha male of Basudha was engaged in a white collar job. As an indirect result of factionalism in the village, he had to quit that position. However, it is because of this background of white collar job and ritual status that the Kayasthas occupy a superior position in the caste hierarchy. Ritually, drinking water offered by a Kayastha can be accepted by a Brahman. This is considered as a privilege as most of the Hindu castes are

denied this type of relationship. In spite of all these distinctions, however, the Brahmans of Basudha consider the Kayasthas as members of the Sudra[9] castes. This, the Kayasthas refuse to admit. They claim themselves to be a counterpart of the Kshatriya[10] of other parts of India. As there are very few Kshatriya families in Bengal, and the Kayasthas occupy the second highest position in the regional caste hierarchy, their actual position in the Indian caste structure is somewhat ambiguous.

Sadgope

Though the ritual position of the Sadgopes is not very high, because of their control over economic resources they enjoy a reasonably high position in the caste hierarchy. There are two zamidaar families in the village, both belonging to the Sadgope caste.[11] As a result, though all Sadgopes of Basudha are not zamidaars, they enjoy a privileged position and dominate the village scene in almost all respects. Numerically the Sadgopes also form the largest group of the village. Almost all of them are land owners and only one member of the Sadgope caste works as a farm servant. He works for another Sadgope.

Agricultural farming is the caste occupation of the Sadgope though most of the Sadgopes of Basudha do only supervisory work associated with agriculture. As a caste the Sadgopes belong to the Sudra group. There are seventy Sadgope families in Basudha.

Gandha Banik

Traditionally, the Gandha Banik are dealers in spices. In keeping with the position of traders elsewhere in Bengal the ritual rank of this caste is considered to be low. There is only one Gandha Banik family in the village. It has a moderate economic status and close association with the Sadgope zamidaar. Though the family runs a small grocery shop, it primarily depends on farming for subsistence. It is because of this economic background and close association with the Sadgope zamidaars that the Gandha Baniks are placed quite high in the hierarchy of the village castes and grouped as bhadralok.

Karmakar

The traditional occupation of the Karmakars is that of blacksmith. In addition, it was the duty of the Karmakar to behead a sacrificial animal at the altar of Dharmaraj, the most important deity of the village.[12] There is only one Karmakar family in Basudha. It follows the caste occupation. The Karmakars have a substantial amount of landholding. Recently two members of this caste began to practise carpentry. As there is no other carpenter in the village they derive a good income from this occupation. Consequently, the economic position of the Karmakar of Basudha is quite high. Further, as they belong to more or less the same rank of the village zamidaars, and there is close association between them, the Karmakars are ranked high in the over-all social hierarchy

of the village. It may be noted that the rank of the blacksmith caste is quite low in other parts of India. In Bengal they occupy a somewhat superior position.

Bostom

The position of Bostoms in the caste hierarchy is somewhat ambiguous as the term is used to mean different groups of people in various situations. In certain contexts the word denotes a caste, and in others it may be used to identify a group of people who observe a specific way of life. Often, it refers to members of a religious sect who belong to different castes. In Basudha the word has the connotation of a caste.[13] There are four sub-castes or thak among the Bostoms that can be arranged in hierarchical order and each of them follow different occupations as a means of livelihood. The Bostoms of Basudha belong to the topmost sub-caste, known as grihastha. Traditionally, they are religious preceptors, locally called guru. They are allowed to follow agricultural pursuits also. The guru gives diksha (a secret formula) to their disciples for meditation and occasionally visit them. In return, they receive sidhaa (food offerings) and dakshinaa (money offerings) from their disciples. In Basudha two of the three Bostom families live almost entirely on farming. As they do not have sufficient amount of landholdings, they mostly cultivate lands of Sadgope on share-cropping basis. This economic dependence on the Sadgope has made their status somewhat low. Otherwise, according to ritual status and profession they occupy a higher position than the Sadgope. The Bostoms who follow the profession of

religious preceptor have to observe a certain degree of ritual purity. They are not supposed to eat non-vegetarian food and are expected to perform religious worship regularly.

In Basudha, in addition to their farming and the profession of religious preceptor, the Bostoms also sing devotional songs during some religious rites.

Kalu

Traditionally the Kalus are oilpressers by occupation. This means of livelihood is considered humble and they are ranked low in the caste hierarchy. There are two Kalu families in Basudha and neither of them follow the caste occupation. According to one Kalu villager there was an oilpress in Basudha about twenty years back. But when an oil mill was set up at Guskara, the nearest commercial centre, by a member of the zamidaar family of the same village, the oilpresser could not compete with the mill. Since then oilpressing was stopped in the village and the Kalu switched over to some other economic pursuit. At present one Kalu family lives on farming and the income of a grocery shop that it maintains. The other Kalu family is represented by a single widow. She depends on agricultural lands for her livelihood. Her income is also supplemented by selling parched rice.

Moyra

There is a single Moyra family in Basudha. Traditionally they are confectioners. The Moyra family of this village

follows the traditional economic pursuit. But as income derived from the confectionary barely meets their requirements, an adult male member of the Moyra family works at a big confectionary of a neighbouring industrial center and thus supplements the income of the family. A widow of the family also earns some money by selling parched rice. The Moyras are ranked quite low in the caste hierarchy.

Napit

The Napits are barbers by occupation. Although traditionally the Napits are not ranked very low, as they attend members of various castes and religious groups, some of whom are considered as ceremonially unclean, and as the job involves physical contact with such people, they have got a low position in the caste hierarchy of the village. In Basudha there are three Napit families and only one of them follows the caste occupation. The family that follows the caste occupation also supplements its income by farming and maintaining a grocery shop. The other two families mostly live on income derived from land. One Napit family is represented by a single widow, who derives her major income from the sale of parched rice.

In addition to their traditional occupation the Napits are responsible for cleaning the Dharmaraj temple of the village and for supplying flowers and wood-apple leaves to the temple that are required for daily worship. They also organise the annual worship of the goddess Annapurna (a deity

that symbolises prosperity) towhich other villagers voluntarily contribute.

Sunri

The Sunris are distillers, an occupation which is ranked very low in the caste hierarchy. Due to restrictions imposed by the government on the preparation of liquor, only one Sunri family of Basudha is permitted to follow the caste occupation. The family is also engaged in farming to supplement its income. All other Sunri families, except one that supplements its income by keeping a grocery, live entirely on farming. There are four Sunri families in the village. As the Sunris of Basudha have sufficient landholdings to maintain their families and as none of them depend on others for economic support, they are somewhat respected.

Namosudra

The traditional ritual status of the Namosudras is generally considered to be very low although their exact position is a matter of some debate. This is probably because of the myth that surrounds their origin and occupation. Some early authors[14] consider the Namosudra as a synonym for the Chandal, who are depicted by Manu, the ancient Hindu lawgiver, as the lowest of the mankind. However, the Namosudras of Basudha call themselves Kotal, who are village watchmen by traditional occupation. For

this duty the Kotal enjoyed some rent free land.[15] In Basudha there are seven Kotal families. They have small landholdings and supplement their income by sharecropping. One member from a Kotal family passed matriculation examination and is now a teacher in a school of a neighbouring village. As most of the Kotals have some education, they enjoy a better secular status in the village.

Bagdi

Bagdi is one of the untouchable castes of the village. The members of this caste are well known for their physical prowess and during the time of the feudal landlords they worked as their guardsmen. The Bagdis have a bad reputation for following the occupation of robbery.[16] This does not, however, mean that everyone of this caste follows criminal pursuit. A remnant of their former occupation of robbery is traced from their worship of the goddess Kali.[17] None but the Bagdis worship Kali in Basudha. It is said by the bhadralok that before setting out for a robbery expedition the Bagdis used to worship the goddess Kali. Despite this myth the Bagdis are considered quite high among the untouchable castes of Basudha. As they employ the services of Brahman priests (though of lower status) during religious ceremonies and rites, which most of the untouchable castes do not do, they enjoy this status.

There are fortytwo Bagdi families in Basudha. At

present, they mostly work as agricultural labourers. Bagdi women mostly work as domestic servants locally known as patkurani. They sometimes work in agricultural fields also. One Bagdi family has some cultivable land and the head of that family is an employee of the railways.

Dome

Traditionally, the Domes are sweepers and basket-makers. Some follow the occupation of musicians as well. These different occupations are associated with different subcastes of the Dome. The Domes of Basudha call themselves Akure. Traditionally they are basket-makers. But as there is a dearth of raw materials here none of them follow the caste occupation. Instead, they work as agricultural labourers and sometimes as day labourers. Two members of the Dome caste work as chowkidaar[18] in the police department of the state government. The Domes also belong to the group of untouchable castes of Basudha. There are ten Dome families in the village.

Ranakarmakar

Though the Ranakarmakars have been treated as members of a separate caste, they seem to be one of the subcastes of Karmakars who follow iron smithery as their caste occupation. The Ranakarmakars are semiperipatetic in nature. They come to Basudha from Bihar about a year ago and erected temporary huts on the bank of a pond belonging to the zamidaar. They

do all kinds of smithery as the village Karmakars do but they have no hereditary customers as the village blacksmiths have. They sell their goods in nearby markets and neighbouring villages. It is because of their semiperipatetic nature and ritually unclean habits that they are ranked low in the caste hierarchy. They are treated as untouchables in the village. There are two Ranakarmakar families in Basudha.

Bauri

Traditionally, the Bauri are palanquin or litter bearers (paalki) and agricultural labourers. In Basudha, almost all Bauri men work as agricultural labourers. Two of them do some sharecropping of the zamidaar and another works as an employee of the canal authority. Most of the Bauri women work as domestic servants of the Sadgope. At one time a Bauri of the village owned a palanquin. When the roads were developed people came to depend on bullock-carts for transportation. Naturally, there was not much demand for the palanquin and it went almost out of use. Then the owner of that palanquin mortgaged it with the liquor dealer of the village for undistilled liquor. Since then the palanquin has been lying there and the Bauri have completely given up that occupation. Because of their ceremonially unclean habits the Bauri are ranked very low in the caste hierarchy and are treated as untouchables. There are fiftyeight Bauri families in Basudha.

Mogheya Dome

They are recent inmigrants to Basudha from Bihar. They work as agricultural labourers. Their women also work in the agricultural fields, particularly during transplantation and harvesting seasons. As they are inmigrants, most of the villagers are unfamiliear with their ritual status. However, as their food habits are considered ceremonially unclean, they are treated as untouchables. There are eight Mogheya Dome families in Basudha.

Santal

The Santal make up the largest Scheduled Tribe[19] of West Bengal. Though the Santals of Basucha migrated here from the state of Bihar they are found all over West Bengal. The traditional occupation of the Santals is collection of forest products, hunting, fishing, and cultivation.[20] In Basudha, they form the principal source of the agricultural labour force. Santal women also work as agricultural labourers. Two members of the Santal community have some agricultural lands and a few others are engaged as sharecroppers of the local zamidaar. Linguistically and culturally they are very different and distinct. Though operationally we have included the Santals in the Hindu caste hierarchy, they maintain their separate identity and call themselves majhi (an honorific term which usually refers to a Santal

head man). In Basudha the Santals are considered as untouchables. There are thirty Santal families in the village.

The above description of castes of Basudha reveals a segmentary character of the Hindu society. In the segmentary system of Hindu caste hierarchy the structural distance of one caste from another may vary depending on their mutual positions, which are fixed within broad limits.[21]

In order to have a clear understanding of the social structure of Basudha it is necessary to take into account three important units: the parivaar, the bhayaad, and the gnati.[22] The term parivaar means family. Here the word denotes any type of family, either nuclear, extended, or compound. The term bhayaad refers to consanguines through the male line.[23] It may be noted here that the bhayaad relationship is an extension of intra-family relationship that lasts even after partition of the family. The relationship, however, is not extended indefinitely as the bhayaad members are subject to pollution if there is any birth or death within the bhayaad group. Usually the relationship is stretched up to the fifth generation and then by a unanimous decision of the bhayaad members the relationship is cancelled. After cancellation of the bhayaad bond they remain tied up by another bond known as gnati, the membership of which is never withdrawn or cancelled. A gnati is a lineage group, the members of which trace their

descent from a common ancestor through the male line. The gnati tie can be stretched indefinitedy. To illustrate this, when a baby is born in a family, by virtue of its birth, it becomes a member of a parivaar, a bhayaad, and a gnati. When the parivaar, grows too big it usually breaks up into smaller units of parivaar. Thus some of the former parivaar members become bhayaad. Again when a bhayaad grows too big it breaks up and some of the former bhayaad members become gnati. In spite of these structural changes a man always remains a member of parivaar, a bhayaad, and a gnati.

No residence rules are attached to these three units. As a result, if someone migrates to a different village with his family he remains tied up with the members of his bhayaad, and gnati of the original village. It may be noted here that in Basudha all members of a particular caste are related to one another through parivaar, bhayaad, or gnati relationships. In some rare cases where this consanguinal relationship does not exist, they are linked through affinal relationship.

As the castes are endogamous in nature, kinship relationships across caste are not possible, though a ceremonial friendship or relationship can be established across caste or religion. Where this cremonial relationship exists across the caste or religion the strictness of the observance of caste and religious rules is reduced.

Functionally, a parivaar or family is more important than a bhavaad or a gnati. Unlike the other two units the members of a family share economic responsibilities and obligations jointly. It is a unit of unlimited mutual trust and demands.

It has already been mentioned that a family may be of a nuclear, compound, or an extended type. Table 10 gives distribution of different types of family in Basudha.

The table reveals that about 68.7 per cent of the total families of Basudha are of nuclear type[24] and most of them also belong to the landless class. For example 80.9 per cent of the Bagdi families, 82.7 per cent of the Bauri families, ninety per cent of the Dome families, seventyfive per cent of the Mogheya Dome families, and sixty per cent of the Santal families belong to this type. This suggests a relationship between nuclear family and landlessness in the village. The highest percentage (39.06%) of extended families[25] are from the Sadgope caste that own 66 per cent of the village land. This also implies a relationship between the possession of land and the extended family.

There are very few compound families in the village (1.41%). All of them consist of children by wive's former husbands, or by husband's former wives. All of the compound families are from the chhotalok castes. Seven per cent of

the total families of Basudha have been classified as miscellaneous type. They mostly comprised single person families such as widows who do not have any near kin to look after them.

Table 10. Type of Family by Caste.

Caste	Nuclear	Compound	Extended	Miscellaneous	Total
Bagdi	34	0	4	4	42
Bauri	48	2	6	2	58
Bostom	3	0	0	0	3
Brahman	1	0	1	0	2
Dome	9	0	1	0	10
Gandha Banik	0	0	1	0	1
Kalu	1	0	0	1	2
Karmakar	0	0	1	0	1
Kayastha	1	0	0	0	1
Mogheya Dome	6	0	2	0	8
Moyra	1	0	0	0	1
Muslim	26	0	8	4	38
Namosudra	4	0	1	2	7
Napit	1	0	1	1	3
Ranakarmakar	1	1	0	0	2
Sadgope	39	0	25	6	70
Santal	18	1	11	0	30
Sunri	2	0	2	0	4
Total:	195	4	64	20	283

Table 11. Family Size according to Caste.

Family size	Bagdi	Bauri	Bostom	Brahman	Dome	Gandha Banik	Kalu	Karmakar	Kayastha
1	3	2	0	0	0	0	1	0	0
2	8	5	0	0	1	0	0	0	0
3	7	16	0	0	4	0	1	0	0
4	6	4	0	0	0	0	0	0	0
5	7	16	0	0	3	0	0	0	0
6	3	6	1	1	2	0	0	0	0
7	2	5	0	0	0	1	0	0	0
8	3	4	2	1	0	0	0	0	1
9	1	0	0	0	0	0	0	0	0
10	2	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	1	0
15	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0
Total	42	58	3	2	10	1	2	1	1

Contd....

Table 11. contd.

Family size	Mogheya Dome	Moyra	Muslim	Namo-sudra	Napit	Rana-karmakar	Sad-gope	Santal	Sunri	Total No. of families
1	0	0	4	0	1	0	3	0	0	14
2	0	0	4	1	1	0	1	2	0	23
3	3	0	0	0	0	2	3	5	0	41
4	0	0	6	1	0	0	7	5	1	30
5	2	1	10	2	0	0	9	1	0	50
6	2	0	6	2	1	0	3	4	1	33
7	0	0	2	1	0	0	15	7	1	34
8	0	0	1	0	0	0	7	2	0	21
9	1	0	1	0	0	0	7	2	0	12
10	0	0	2	0	0	0	2	2	0	8
11	0	0	1	0	0	0	2	0	1	4
12	0	0	0	0	0	0	2	0	0	2
13	0	0	0	0	0	0	1	0	0	1
14	0	0	0	0	0	0	1	0	0	2
15	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	2	0	0	2
17	0	0	1	0	0	0	1	0	0	2
18	0	0	0	0	0	0	3	0	0	3
19	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	1	0	0	1
Total	8	1	38	7	3	2	70	30	4	283

The average size of family in Basudha is 5.63. There are several families that consisted of single individuals. On the other hand there is one family that consisted of as many as twenty members. The distribution of family size according to caste is given in Table 11. The table reveals that though there is a wide distribution of family size in Basudha the majority of the families of the village comprised of four to seven members. As the table indicates, all the large families belong to the Sadgope caste.

Although the concepts of parivaar, bhayaad, and gnati are quite familiar among the Muslims of Basudha they pay less importance to bhayaad and gnati relationships than the Hindus. To them the bhayaad relationship gets some importance at the time of any feud and factionalism. The gnati relationship among the Muslims is practically defunct as no social obligation is attached to it. On the other hand, among the Hindus, the bhayaad and gnati relationships have become more important in recent years because, to some extent, these regulate the political behaviour of the individuals.

Though there is no regular sharing of economic responsibilities among the bhayaad and gnati members, they often extend economic cooperation and their relationship is also controlled by mutual demands and trust.

Another social unit in Basudha, though very informal in

nature, is the gossip-group. It is a voluntary association, membership in which is extended to neighbours who ordinarily belong to the same caste. Though some cross caste gossip-groups were found, there were none in the village in which members of both bhadralok and chhotalok castes participated.

The gossip-group plays an important decision making role in the village. There is a sense of comradeship among the members of a gossip-group and the villagers hardly do anything without previously discussing it in the gossip group. There are ten such gossip-groups in the village where most of the important decisions pertaining to individual, group, or village are made.

In order to have a clear picture of the social relations of the village as a whole, it is necessary to consider the intravillage relationships of different castes and religious groups. As far as the Hindu-Muslim relationship is concerned there is no stress between the bhadralok and the Muslim. Basudha is a Hindu majority village[26] and the Muslims are economically dependent on the Hindu zamidaar. Though their feelings about the Hindu zamidaar were not always very happy they seldom expressed their grievances. The relationship between the Muslims and chhotalok, however, is rather uncordial. There are two reasons for this. First, the Muslim cultivators of Basudha have a good reputation as sincere workers. For this reason the Hindu landowners prefer Muslims to chhotalok as sharecroppers. As a result

the chhotalok feel that they are being deprived because of the presence of Muslims in the village. They also have similar grievances against the Santal inmigrants. This, however, has not led to any village dispute. Another complaint that the Muslim make against the chhotalok is that the latter group treat Muslims as untouchables. As the Muslim eat beef and do not have the ento[27] concept, to the Hindu chhotalok, with the exception of Santals and Mogheya Domes, they are ceremonially unclean. The Muslims feel particularly unhappy about this attitude of the chhotalok because the Hindu bhadralok considers both chhotalok and Muslims as ceremonially unclean. Then, instead of receiving a fellow-feeling from the chhotalok they receive a somewhat hostile treatment. Although there has been no major dispute in the village on this issue, the relationship between the Muslims and the chhotalok, particularly the Bagdi,[28] is strained.

The relationship between the bhadralok and chhotalok is apparently smooth. As the latter group is economically tied up with the former, the chhotalok have little scope to express their grievances.

As far as the hierarchical relationship is concerned the chhotalok accept the bhadralok as superior to them and remain content with their own inferior position. This does not, however, rule out the possibility of sanskritization[29] among the lower castes. (Sanskritization is a process whereby

lower castes enhance or change their status by adopting ways of upper castes.) In fact, the process was evident when some members of the Bauri, Bagdi, and Dome castes claimed a superior origin and changed their surnames in the night school[30] record of the village. But as it was not an well integrated effort and many of their members did not take part in this movement, it had no lasting effect.

There are multiple evidences of factionalism in the village. These will be dealt with in connection with the political life of the village. However, as the factions have alliance with national political parties, they often crossed the boundary of intracaste or intrareligious factions.

We have described in this chapter the structural components of the community life in Basudha. Though the discussion emphasised the intricately segmented character of the community, there are certain cementing factors that makes "... an equilibrium between opposed tendencies/toward fission and fusion, between the tendency of groups to segment, and the tendency of groups to combine...."[31] Most of these cementing factors are of an economic nature and will be discussed in connection with economic life of the village. There are, however, certain noneconomic factors too, that integrate the society as a complex whole.[32] Most of them are from the realm of cultural life. For example, Dharmaraj is the

household deity of the Sadgope zamidaar. All the Hindu villagers of Basudha jointly celebrate the worship of Dharmaraj once every year with much pomp and grandeur. The festival continues for four days and at that time every Hindu villager feels that it is his festival. All Hindu families who have the ability to pay make subscriptions toward the expenses of this community worship. Members of every Hindu caste, irrespective of bhadralok or chhotalok can become bhoktaa[33] of Dharmaraj during gajan[34] and offer fruits and sweets to the deity.

During Lakshmipuja, which is also another community worship, members of different castes also participate together. At the time of any such worship the villagers stage folk drama and members of all Hindu castes and Muslims take part in the drama.

Ordinarily, the Muslims and members of the lower castes are not allowed to touch the platform of the Dharmaraj temple. But at the time of performance of the drama no discrimination is made against the actors. Intervillage sports also demand cooperation of all the villagers irrespective of caste or religion.

There are many such occasions when the villagers, in spite of so many caste and other differences, feel that they are one and respond unitedly. During our stay in the village a group of Ramayan singers was visiting a neighbouring village.

When one of the village leaders of the zamidaar family decided to invite the singers to Basudha and asked for voluntary contributions, the villagers responded unitedly and the village leader got more money than what he expected. The Muslim villagers also contributed money to have the performance in the village.

The solidarity of the village becomes more evident when the prestige of the village is involved in an issue. It so happened that in one of the neighbouring villages the Ramayan singers had their performance there for twenty-one days. When they had completed two weeks of their performance in Basudha, the villagers felt that it was below their dignity to have them for less than twenty-one days. As it became a prestige issue the villagers voluntarily contributed and the group stayed in the village for thirty-two days and had a performance every night. Though many of the villagers felt that it was a big drain on their money they responded unitedly.

The above facts bear evidences of a sort of "we" feeling among the villagers. To them all outsiders belong to the "they" group with the exception of those who are related to some villager through marriage. In case of any difficulty of a fellow villager, others often become concerned and extend help. It becomes more evident if the difficulty is caused by some one from the "they" group. This was

demonstrated when a bullock cart load of paddy of one of the villagers was seized by the police. Most of the villagers who had some acquaintance with the government officials tried to exert their influence to get the paddy released. This is an indication that the villagers do have an area of mutual interest and mutual concern and if something happens in that area all the villagers may react unitedly.

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FOOTNOTES

1. On the basis of aristocracy, the Muslims of Basudha, can be divided into two groups viz., the Seikh and the Mandal. The Seikhs are the commoners who live on farming. The Mandals, on the other hand, are the landlords. Though according to custom there is no prohibition of marriage between the two groups they tend to be discrete and prefer to marry within the group.

2. Although these castes are hierarchically distinct and maintain their respective ritual purity, this does not prevent members from maintaining informal relations across castes. In secular matters there is a sort of equality among them. See Jyotirmayee Sarma "A Village in West Bengal," in India's Villages, by M.N. Srinivas (ed.), Bombay: Asia Publishing House, 1960: 180-201.

3. This word is used to identify members of lower caste origin. Although the members of these castes are ritually distinct, in secular matters there is a sort of equality among them.

4. Here the word marginal has been used in a somewhat broad sense. The two groups, bhadralok and chhotalok, are not necessarily antagonistic though they occupy the opposite poles of a continuum. Compare Park, Robert E., "Introduction," in the The Marginal Man, by E.V. Stonequist, New York: Carles Scribner's Sons, 1937: XIII - XVIII.

5. The nature of clean and unclean castes is determined partially by the food habits of the people concerned. If one eats certain kinds of food, he is always capable of rendering the food and water of upper caste Hindus impure. As his very touch is detrimental to the purity of upper caste Hindus, he is called an unclean.

6. It is on the basis of this rule that the Hindu castes, particularly of Bengal, are divided into jalchal and jalachal castes. Those who can offer drinking water to a Brahman are called jalchal, and those from whom a Brahman cannot accept water, as it is defiled by their touch, are called jalachal.

7. In table 8 the economic factor got the primary importance while arranging the castes in order, though the ritual factor was not ignored. In table 9 ritual, economic, and political factors each got equal importance.

8. Details of factionalism have been discussed in connection with the political life of the village, Chapter IV.

9. It is one of the fourfold varna divisions of India. There is a great deal of regional variation in the hierarchical order of caste structure in India. The order of varna system is pan Indian. It is with reference to the varna divisions that the castes from various parts of India can be organised into a meaningful order.

10. The Kshatriyas occupy the second highest position of the varna division. Traditionally they are the rulers and

warriors. It is because of this tradition that they are ranked very high.

11. The Sadgope of zamidaar families are referred to as babu in this village. The word babu is an honorific term used for showing respect to someone.

12. Until recently the sacrifice of a goat was an important part of the Dharmaraj worship. During the days of the annual festival, they would be sacrificed in dozens. Since some members of the zamidaar family became disciples of Anukul Thakur, an important religious preceptor, the sacrifice of animals has been stopped.

13. Here we used the word caste as it has been defined by Béteille. See Béteille, André, Caste, Class, and Power, Bombay: Oxford University Press, 1966: 46.

14. See Das, Amal Kumar, et al., Handbook on Scheduled Castes and Scheduled Tribes of West Bengal, Calcutta: Cultural Research Institute, Govt. of West Bengal, 1966: 83.

15. Ibid., p.63.

16. It is stated that about fifty years ago, when most of surrounding fields of Basudha remained uncultivated, the Bagdi would go there at night and wait for the passersby. If someone happened to come that way they would throw a small baton, locally known as fabra from a distance aiming his legs. If the person fell on the ground the Bagdi would rush to him, kill him, and fly away with the booty.

According to one villager it so happened that one of the Bagdis of Basudha unknowingly killed his own son this way while plundering. When he came to know of this he was full of remorse and gave up this profession. This happened about seventyfive years ago.

17. An incarnation of the supreme Hindu deity, Shakti.

18. Literally means watchman. It is the lowest position in the organisational set up of the police department.

19. These are remnants of aboriginal tribes not fully assimilated into Hindu society. They are listed in a special schedule issued by the government and are entitled to some special benefits.

20. See Das, A.K., et al., op. cit., p.153.

21. See Béteille, André, op. cit., p.47.

22. The word gnati refers to a lineage group.

23. It may be mentioned here that the people are patrilineal that is, descent is traced through the male line.

24. A neclear family "consists of a married man and woman with their offspring", although in exceptional cases a widowed mother of the man may live with the family.

25. Most of the extended families consist of a number of a nuclear families of different generations living together. Only in a cases do married brothers with their respective spouses and children live together to form an

extended family. The Sadgope extended families of Basudha are a combination of both types of extended family.

26. Only 12.60 per cent of the population of Basudha are Muslim.

27. The upper caste Hindus in general and the lower caste Hindus to a certain extent observe rules of untouchability about cooked food. The touching of such food requires an amount of ceremonial cleanliness from the householders themselves, such as bathing and putting on washed clothes. If someone touches cooked food his hands need to be washed. Even if a clean object comes in touch with cooked food or a container where cooked food had been kept, then the object has to be washed. This type of cermonial cleanliness is known as ento in Bengal.

28. The Bagdi and Muslim live side by side in the village. As there is a close contact between them their relationship often becomes strained.

29. See Srinivas, M.N., "A Note on Sanskritization and Westernization", Far Eastern Quarterly, Vol. 15, 1956: 481-496.

30. It was an adult education centre organised under the community development programme. Mostly the people of lower castes took advantage of the night school.

31. See Evans-Pritchard, E.E., The Nuer, Oxford: Clarendon Press, 1940: 147-148.

32. See Redfield, Robert, The Little Community, Chicago: The University of Chicago Press, 1963: 1-16.

33. Special devotee for the occasion.

34. The word ordinarily means the festival of Lord Shiva. The villagers use the word in a broader sense to mean festival.

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CHAPTER III

ECONOMIC LIFE

Agriculture is the principal basis of economy of the people of Basudha. Though most of the village lands are occupied by the Sadgope zamidaar and a great portion of the villagers are landless, the major income derived by the villagers is from agricultural and allied jobs. Those who have sufficient cultivable land usually do only the supervisory work of farming. Those who do not possess land work as farm servants, locally called munish,[1] either in annual terms or as daily wage labourers. No matter whether a person works as a farm servant or a sharecropper, to him the landowner is always a manib, i.e. master.

On the basis of ownership of land, the families of Basudha can be divided into two broad groups viz., the manib and the munish. There are three Hindu families that do not fit into this dichotomy. All of them own some amount of cultivable land. They do not employ any labourer for cultivation, nor do they work in others' field as wage labourers. They supplement their income by selling groceries or following some other economic pursuits.

In the economic life of the village the manib, who have the maximum control over economic resources, play the dominant role. A manib can directly supervise the agricultural activities in his lands or can play an indirect role by

distributing his lands to sharecroppers. When he directly supervises his farming, he employs a number of farm servants called munish, maandaar, botaare, and baagaal, depending on the nature of job and terms of service. When his supervisory role is indirect, the manib can engage different types of sharecroppers known as kirsaan, jotedaar, and saajaabhaagi. There are a number of domestic servants who directly or indirectly contribute to the agricultural activities of their manib. In order to have a clear understanding of the economic life of the village, it is necessary to know the relationships between a manib and his various types of farm servants and sharecroppers.

Munish

In Basudha, though the word munish is sometimes used to mean regular farm servants who work at fixed annual terms, strictly taken the word means daily wage labourers only. There are two types of daily wage labourers, viz. indigenous daily wage labourers and seasonal inmigrants. The farmers of Basudha usually depend upon the Dome, Bagdi, Bauri, Mogheya Dome, and Santal of the village for farm labour. During transplantation and harvesting season the local labourers cannot meet the demand. Therefore during these periods the farmers have to employ labourers from outside. The Santal labourers of Dumka, Bihar, usually migrate to this area temporarily to meet the local demand. There are various patterns of their recruitment. For example, the labourers themselves can migrate to this area under the leadership of a middleman

locally called sardaar or the villagers can go to Dumka and pick them up. The inmigrant labourers are locally known as bideshi munish.

The relationship of a manib with the local munish is different from that with the seasonal labourers. As the former group lives in the same village of the manib the munish develop relationships with them in many ways that are not extended to the seasonal labourers.

For his services a labourer earns Rs. 1.50 and food per day. It is the local custom to supply 1¼ seer[2] of rice, some firewood, vegetables, spices, and cooking oil as substitutes for meals served. In addition, the labourers get one paai[3] murhi (parched rice) per head per day. Local labourers are sometimes served with cooked food also but in the case of seasonal labourers cooked food is not served. There is, in fact, no prohibition in serving them cooked food. But, as they are employed in seasons when a large number of labourers are employed by the manib it is not physically possible for the manib to supply all the munish with cooked food. The seasonal labourers, in addition to their daily wage, get one way passage between their native place and the place of work.

In the day-to-day economic life of the villagers the nature of understanding between the manib and his munish is very important. If a munish is in the good books of his manib the manib always helps him in times of distress. The munish

can borrow money from his manib at a very nominal rate of interest. This is a regular system locally called byaz. Now a days daadan has become more popular than byaz. Daadan is an advance payment received by a labourer for his services for the next agricultural season. Labourers paid through daadan get slightly less wages than the normal rate of payment. This system is based entirely on trust between the manib and the munish.

If both manib and munish consider each other dependable they sometimes develop a paalaa relationship. According to this system usually a manib gives his munish a heifer to raise. When the heifer calves for the first time, the munish gets the entire amount of milk during the first calving and also the young calf that is born. According to contract when the cow conceives again she is returned to the manib before parturition. The munish can rear goats and hens also according to this system. In the case of a goat the nature of contract is similar to that of a cow. Usually a munish keeps the goat forever and the kids of the first birth. Then onward the kids are equally divided between the manib and munish. When hens are raised in this system, the eggs are also equally divided between the parties. The hen or goat is never returned to the manib. According to tradition the upper caste Hindus are not permitted to raise chickens though no strict prohibition is observed about eating eggs or chicken, particularly by the male members. As a result chickens are always raised by the munish.

Another economic system that operates between a manib and his munish is known as begaar system. Only when the manib is a zamidaar, is the begaar system found. Prior to the legal abolition of zamidaari system in 1950, the munish lived on the tax free land of zamidaar. So, it was customary for them to render free service to the zamidaar at the time of transplantation and harvesting seasons as a token of respect. The present begaar system is a legacy of that. Though the munish cannot claim any payment for the begaar service, in Basudha they are paid Re. 0.50 per head per day, and are entertained with country liquor. Though some labourers interpret begaar as an unpaid forced labour, to most of them it is a sign of respect shown to the former zamidaar.

In Basudha most of the landless labourers render begaar service. Some, being influenced by the socialist doctrine of egalitarianism feel that it is derogatory for a man of a free country to perform begaar service and have therefore stopped rendering it. Although the zamidaars were not very happy about the cessation of some begaar service, they were rather compelled to ignore it as village factions and different political parties were involved in the matter.

With the seasonal agricultural labourers, the relationship of a manib is mostly contractual, i.e., limited to the extent of getting the work done and paying the daily wages. When the same group of seasonal labourers work for a particular

manib for consecutive years and begin to trust each other fully, the daadan relationship is sometimes established. This indirectly helps the manib also as it saves his trouble of going to Dumka in Bihar to pick up the labourers.

Maandaar

A maandaar is an agricultural labourer recruited on the 1st day of Phalgoon (eleventh month of the Bengali calendar) on annual terms. Usually male members of Bagdi, Bauri, Dome, Mogheya Dome, and Santal castes are recruited as maandaar. A maandaar does all outdoor agricultural duties and takes care of the bullocks. For his service he usually gets Rs. 500.00, four pieces of dhuti[4] four pieces of towels and one piece of chaddar[5] every year. In addition he is provided with three meals every day. It is the usual practice of a maandaar to eat the breakfast at the house of the manib and to carry home his lunch and dinner.

A manib has a few other obligations to fulfil toward his maandaar. If he gets sick the manib has to pay for his treatment. Further, a maandaar cannot be terminated in the middle of the year. Even when the term is over, for termination of his job one month's notice is required. Further, if a maandaar is unable to work for a brief period due to sickness or other good reason, no deductions can be made from his salary.

The paalaa relationship is sometimes found between a manib and his maandaar. But no begaar, daadan, or byaz

relationship is established between them. If a maandaar is in distress, he can always borrow food grains under baari system. According to the system it is rather obligatory for a manib to give his maandaar the desired amount of food grains when required. The maandaar has to pay an interest of twentyfive per cent and return the total amount of food grains in the next harvesting season.

During recent years, due to fluctuating market rates, some farmers sell the entire amount of their surplus food grains. This puts their maandaars in difficulty as they cannot get the desired amount of food grains at the time of their need. To prevent this some landowners voluntarily organised a dharmagolaa[6] from which the farm servants can borrow any amount of food grains at any time of their need.

Botaare

A botaare is also a farm servant who works for his manib. His nature of duties is similar to that of a maandaar, but the salary of a botaare and his terms of contract are different. A botaare gets two meals and Re. 0.25 per day. In addition, he is paid 16 maunds[7] of paddy and some straw annually. A manib is not responsible for medical expenses of a botaare and deductions can be made from his salary if he is absent from duty for several days. Although benefits of baari and paalaa can be enjoyed by a botaare, the systems of begaar, byaz, and daadan are not applicable to him.

Baagaal

A baagaal is a cow boy of young age. Usually children of maandaar and botaare work as baagaal. His responsibility is to look after the cows and goats of the manib, feed them in time, clean the cowsheds, and chop straw for fodder. It may be noted here that a baagaal is not supposed to feed the bullocks. The villagers take special care of the bullocks. The responsibility of feeding them is that of a senior farm servant, maandaar. For his services, a baagaal gets three meals every day, and Rs. 20.00, three maunds of paddy, four shorts, four towels, one shirt and one chaddar every year. The manib does not pay anything toward his medical expenses, and no deductions are made if he is absent from duty once in a while. The baari, paalaa, byaz, daadan, and begaar systems are not applicable to him.

Jotedaar

Until recently most of the village lands were cultivated by the sharecroppers, and the actual owner of the land had very little involvement with agricultural activities. The sharecroppers were known as jotedaars. According to custom a jotedaar would cultivate the land and meet all expenses necessary for agriculture. In return, he would get half of the total produce. The other half would go to the manib. This system of cultivation was known as bargadar system. But when the bargadar Act was introduced in order to distribute lands among the actual cultivators, the system of cultivation in Basudha

changed. However, some of the land-owners retained the old relationship with their jotedaars. After implementation of the Bargadar Act, it was expected that the jotedaar would come forward and claim ownership of the land that he was cultivating. However, in Basudha, no such case was recorded. On the contrary, the relationships between the manibs and their jotedaars remained very cordial. According to the old relationship a jotedaar is eligible to borrow food grains from his manib as per baari system. The paalaa relationship is also established between them. If the manib is a zamidaar the jotedaar is subject to render begaar to his manib. Usually a jotedaar does not take byaz or daadan from his manib.

Kirsaan

After the implementation of the Bargadar Act, many landowners, being afraid of losing the right over their land, made a new arrangement with their sharecroppers. According to this arrangement, the landowners supply seeds, fertilisers, plough, bullocks and other items required for cultivation and the sharecropper supplies only labour. After harvest, one-third of the yield goes to the sharecropper and two-thirds remains as the land owner's share. This new arrangement is locally known as kirsaani system and the sharecroppers who cultivate on this system are called kirsaan. Apart from the above there are no other differences between a kirsaan and a jotedaar.

Saajaabhaagi

A saajaabhaagi is also a sharecropper who works on a contract basis. This is an old system. Formerly, when the irrigation system was not properly developed in this area, the landowners would distribute land to the saajaabhaagi who were bound to pay a certain amount of paddy and straw every year. The usual rate was 5.5 maunds of paddy per bigha[8] of land. The expenses of cultivation were entirely borne by the sharecropper. A saajaabhaagi is eligible for other benefits enjoyed by a kirsaan or a munish. Although this system still exists in Basudha it is not much in use. In cases of absentee land owners, this system is preferred to other systems of sharecropping.

There are a few other servants of a manib who are not directly involved in agricultural operations. Their contributions to agriculture are rather indirect. They are aagaldaar, dhaanbhaanaani, murhibhaajaani, and paatkuroni.

Aagaldaar

An aagaldaar is a watchman who guards agricultural fields from the act of burglary when the crops become almost ready for harvest. The land owners of the village jointly employ the aagaldaar and contribute toward construction of his "watch-huts".[9] Usually the Muslims of Murshidabad District of West Bengal or the Hindu displaced persons from East Pakistan work as aagaldaars in this area. They watch the fields until the last plot of land is harvested. They get as their remuneration 1.25 kilogrammes of paddy and some straw per bigha

of land they guard. This is the only relationship between a land owner and his aagaldaar.

Dhaanbhaanaani

Usually women of landless castes work as dhanbhanaani in the house of their manib. In Basudha, most of the Bagdi and Dome women work as dhaanbhaanaani to supplement their family income. Their duty is to husk paddy. For every twenty seers of rice they husk, they get one paai of rice and one paai of murhi (parched rice). The manib provides the husking lever. In addition to their duty of paddy husking, sometimes they boil paddy to make parboiled rice. They are paid separately for this extra work. Sometimes paalaa relationship is also established between a manib and his dhaanbhaanaani. Although it is not obligatory for a manib to employ the same dhaanbhaanaani every year, usually the same person is preferred.

Murhibhaajani

Women of ceremonially clean castes like Sadgope, Napit, Boston, and Moyra work as murhibhaajani. Their duty is to prepare parched rice that is consumed by the villagers in huge quantities twice or three times every day. For every kholaa[10] of rice they fry they get one paai murhi. In addition, a murhibhaajani gets one meal for every working day. Usually the same murhibhaajani works for her manib throughout the year and, apart from her usual remuneration she gets a piece of sharee annually. Sometimes the paalaa relationship is also established between a murhibhaajani and

her manib.

Paatkuroni

Paatkuroni is a domestic servant who does most of the cleaning jobs. Women of Bauri caste usually work as paatkuroni. In addition to their regular duty, sometimes they boil and dry paddy of her manib to prepare parboiled rice. As remuneration they get two meals per day, rupees two per month, and two pieces of sharees every year. The paalaa system can be extended to a paatkuroni.

Apart from the above kinds of economic relationships most of the other work arrangements of the village are regulated by a hereditary system of economic interdependence between castes, generally known as jajmaani system. This is a kind of hereditary workman-customer relationship found all over India and it lasts over many generations. According to this system it is the duty of the professional and artisan castes to meet the reasonable needs of their jajmaan, and it is the obligation of the jajmaan to call upon them for their service. He is not supposed to call upon anybody else. In case he does, he is obliged to pay a compensation equivalent to the usual rate of payment.

Brahman, Karmakar, and Napit are the important professional and service castes of Basudha who work on this system. According to jajmaani system the Brahman of the village serve the Sadgope, Kayastha, Gandha Banik, Karmakar, and Napit as

priests. Although according to caste rules, a Brahman can serve the Moyra also, in this village they do not do so. As the Moyra migrated to Basudha recently no jaimaani relationship has yet developed between them.

Services of a Brahman priest are employed at the time of any religious ceremony, marriage, and death. For ordinary domestic worship a Brahman is paid dakshinaa[11] and naibedya.[12] The amount of dakshinaa and the quantity of naibedya vary according to ability of the donor to pay. For regular worships in the village temples, the Brahmans are given rent free land that they cultivate generation after generation. During annual Dharmaraj festival the Brahmans are given a regular share of the pranaami.[13] It may be noted here that at the annual worship of Dharmaraj the members of chhotalok castes also make offerings to the deity. But as the village Brahman refrains from serving them a member of the Sadgope caste acts as their Brahman. He is called deashi. He also gets a share of the pranaami for his services.

The Karmakars(blacksmiths) of the village serve all farmers of Basudha irrespective of caste or religion. They fix and repair ploughs, sickles, and other agricultural implements, and for their services they receive a payment of one maund of paddy per haal (pair of bullock) per year. This annual payment is known as jneo.

During recent years, as the price of paddy has gone up, some villagers have paid the Karmakar in cash at a piece rate

basis. This system is locally known as lagdaa.

As stated earlier, the Karmakars also used to behead the sacrificial animal at the altar of Dharmaraj. This was their ritual duty and for this duty they still enjoy some rent free land from the zamidaar.

As per caste rules, a Napit (barber) of Basudha attends members of all other castes except Bauri, Dome, Mogheya Dome, Namosudra, Ranakarmakar, and Santal. The barber's customers can be divided into four categories on the basis of the nature of the payment they make for his services. The zamidaars are permanent customers whom he attends once every week. As payment he enjoys 2.5 bigha of rent free land. With the non-zamidaar Sadgope and some other castes, he has a more or less similar arrangement. Only instead of giving him land they give him paddy. The rate of payment varies according to the amount of services required. The non-zamidaar members are also attended to once every week. With the Bagdi of the village, the Napit has a yearly arrangement. In their case the payment is made in cash at the rate of one rupee per person. The Napit does not charge anything for attending the children of his Bagdi clients. He attends them once every fortnight.

With the Bostom, Kalu, Kayastha, Moyra, and Sunri of the village the Napit has a lagdaa arrangement. For every hair-cut he charges twenty paise[14] and for a shave he charges ten paise. The Napit does not go to the lagdaa customers. When required they come to him.

The Napit has some ceremonial duty to perform in his jajmans' (customers) houses. If there is a birth, marriage, or death his services are required. For this service he is paid extra, according to the ability of the customer. On ceremonial occasions the Napit woman attends the women of their customers' house. She clips their nails and appl/ies aaltaa (a red fluid) on their feet. For this job she gets one seer of paddy per family per working day.

As stated earlier, the Napit is responsible for cleaning the Dharmaraj temple, supplying flowers there, and also attending the bhoktaa at the time of annual worship. For these services he enjoys one bigha of rent free land from the zamidaar.

Though the Muslims do not fall in the Hindu caste fold they have also hereditary jajmaani relationship with the Karmakar and Napit of the village. However, after a quarrel the Napit discontinued the jajmaani relationship with the Muslim clients. With the Karmakars of the village, however, the relationship of the Muslims is still in vogue.

Among the Brahman, Napit, and Karmakar of the village there is an arrangement by which there is an arrangement by which they enjoy hereditary services from one another free of charge.

Even though the Bostom are not hereditary servants, they have some role to play in the ceremonial life of the villagers. If there is a death in a family, the services of Bostom are requisitioned to follow the funeral procession by singing devotional songs. On the occasion of festivals like Janmaastami,[15] Nandotsab,[16] and Nabaan[17] the Bostom are asked to sing devotional songs. For these services they are paid separately for each occasion. The amount of payment, however, varies depending on the ability of the donor.

The Bostom have a hereditary relationship with the Bagdi of Basudha and some neighbouring villages. The Bostom are their religious preceptors. They visit their disciples once every year after harvest and collect annual sidhaa[18] and dakshinaa. The amount of sidhaa and dakshinaa vary depending on the ability of the disciples to pay.

Though the castes and residents of Basudha provide most of the skills and labour necessary to the maintenance of the village, Basudha is by no means a self sufficient community. The members of lower castes who do not get hereditary services from within the village depend on hereditary services from other villages. There are some castes whose services are deemed essential to the ceremonial, social, and economic functioning of the village though they have no representatives in Basudha. For example, there is no representative of washerman caste, (Dhoba) in the village. The Sadgope

zamidaar engaged a washerman from a neighbouring village for this purpose. There was a hereditary relationship between them and the washerman was given two bigha of rent free land for his services.

There is also no representative of the carpenter caste in Basudha. At one time the villagers employed the services of a carpenter of another neighbouring village and there was jajmaani relationship between them. Since two members of the Karmakar caste of the village started doing carpentry jobs for the villagers on a jajmaani basis, the regular services of the outside carpenter were dispensed with. For ceremonial services, however, the villagers still call on him as the ceremonial services of a carpenter cannot be performed by a member of the Karmakar caste. For example, during the post-funeral ceremony, a carved wooden pole is required. This carving is the ceremonial duty of members of the carpenter caste, so the village carpenters who are blacksmith by caste cannot do it.

The villagers have similar jajmaani relationships with the potters of the neighbouring village of Tetla who supply clay vessels. Formerly, these were used both for domestic and ceremonial purposes. When aluminium vessels came to the market they almost entirely replaced clay vessels for domestic use. As there is still a ceremonial need for clay vessels, the relationship between the outside potters and the

villagers is continued. For clay images of gods and goddesses, the villagers formerly had jajmaani relationship with the Patua of Daihat, another neighbouring village. When the young generation took over control of religious worships they found that the Patua could not make clay images to their satisfaction. So the relationship has been discontinued. Now the villagers buy clay images from the open market.

In the occurence of any death the villagers employ services of a Deshpurohit who chants mantras (sacred verses) at the time of igniting the funeral pyre. A Deshpurohit from the village of Orgram would serve the villagers of Basudha. A Deshpurohit, though a Brahman, is ranked very low because of this occupation. In order to elevate his position in the caste hierarchy he has recently stopped rendering this service.

A Daibak Brahman also serves the villagers for reading horoscopes and for supplying fire wood to the hom (sacrificial fire) at the time of any post-funeral ceremony. The villagers of Basudha get this service from the Daibak Brahman of another neighbouring village. For his services of reading horoscopes he is paid sidhaa at the time of nabaan. At the time of any post-funeral ceremony also he receives sidhaa and dakshinaa.

Services of an Agradani Brahman,[19] a Pandit,[20] and an Ahir[21] are also required if there is any death. The villagers

of Basudha get services of Agradani Brahman and Pandit from Dignagar, and Ahir from Lakshmigunj (other villages of the neighbourhood) on the basis of jajmaani relationship. The Agradani Brahman and Pandit receive sidhaa and dakshinaa and the Ahir gets sidhaa and cash payment of the service.

In addition, during annual Dharmaraj worship, services of a few other castes are also employed. The Malakar (a gardener caste) of Kashipur, a village of the neighbourhood, supply garlands of flower and wood-apple leaves that are required for the special devotees. For this service they enjoy 0.20 acre of rent free land from the zamidaar. Another Malakar and an Agradani Brahman of Ramchandrapur (a village adjacent to Basudha) also extend services during the occasion and are paid in cash terms.

Another non-resident caste that serves the villagers of Basudha, particularly the zamidaars, is the Kaibat (a fisherman caste). There is an economic relationship between the zamidaars of Basudha and the Kaibat of Silegaon. The zamidaars own a large number of ponds and employ Kaibat to catch fish from them. It is obligatory for them to call on the same Kaibat whenever necessary and the Kaibat also feels bound to serve them when required. A portion of the catch is given to him as his remuneration.

Sometimes ponds are distributed to the Kaibat to raise fish. In such arrangements the Kaibat bears all expenses for

raising fish and the catch is always equally shared by the owners of the pond and the Kaibat.

Apart from the above, the villagers of Basudha receive services from some other non-resident castes as well. The village is regularly visited by a cobbler from Banpas, several vegetable dealers from Guskara, tinkers from Burdwan city and other traders from the neighbouring areas. Some of the villagers of Basudha, particularly the Muslims also trade goods outside the village. They collect local commodities such as paddy, rice, parched rice and straw and sell them to the wholesale dealers of the neighbouring commercial centres. Sometimes representatives of the wholesale dealers also come to Basudha to make purchases. In their economic round, the villagers regularly visit the bi-weekly markets at Guskara and Orgram and often go to Burdwan to make their purchases.

The above discussion shows that there is a well structured organisation that controls the economic activities of the villagers and they follow a regular pattern. Though the structure is more or less rigid, the economic relationships in Basudha mostly operate in an informal way.

Traditional patterns still dominate the economic relationships of the villagers. Mention has been made of a few changes that occured in recent years. The only major change that has effected the economic relationships of the villagers

is due to the emergence of factionalism. This has been discussed in some detail, in connection with the political life of the villagers.

FOOTNOTES

1. This is a composite word that means a farm servant who works as a wage labourer, seasonal labourer, or a regular farm servant. Though there are separate words to indicate regular farm servants who work at fixed terms for the whole year, often the villagers use the word munish while referring to them.

2. One seer is equal to 0.93 Kg. In Basudha there are two measures in use. One is known as kaachi seer and the other is paaki seer. One paaki seer always contains 0.93 Kg. In case of kaachi seer it varies from 0.75 Kg. to 0.80 Kg.

3. It is a brass container commonly used in the village for measuring rice and murhi (parched rice). One paaki paai of rice weighs about 0.93 Kg.

4. A white piece of cotton cloth used as men's wrap around apparel in India.

5. It is a piece of coarse cotton cloth used as wrap around by men and women.

6. It is a sort of crop cooperative society from which the members or their nominees can borrow food grains for a one year term. The rate of interest is fixed at 25 per cent.

7. One maund is equal to 37.32 Kgs.

8. In this locality one bigha of land is equal to 0.40 acre.

9. "Watch huts" are temporary shelters where the aagaldaar stays at night in order towatch the fields.

10. It is a measure weighing about 2.80 Kgs.

11. It is an amount of cash honorarium made to a Brahman for his service. According to custom, if a Brahman is invited to eat in the house of his jaimaan he has to be paid an honorarium as his eating is considered a service rendered to his jaimaan. Members of no other caste enjoy this privilege.

12. Naibedya consists of rice, fruits, and sweets that are offered to the deity. According to custom the Brahman priest will take as much share of the naibedya as he likes.

13. Pranaami is cash offerings made to the deity.

14. One paisa (paise in plural) is one-hundredth part of a rupee.

15. It is a Hindu religious festival observed in honour of the birthday celebration of Lord Krishna.

16. Krishna was born in the prison of king Kangsha. On the same night of his birth he was secretly taken to the home of Nanda to avert Kangsha's wrath. Nandotsab is observed to commemorate the safe arrival of Krishna at the Nandas.

17. This is an annual festival of the village when the villagers eat the new crop after harvest for the first time.

18. It is a combination of food articles given to a person in order to show respect to him or as part of his payment.

19. A Brahman who receives the first gift of the post-funeral ceremony. He is ranked very low in the caste hierarchy, even lower than many non-Brahman castes.

20. A Sanskrit scholar whose duty is to watch whether all things are done in a ceremonially correct way. He is ranked high in the caste hierarchy.

21. It is a caste the members of which are specialised in cattle raising. It is the duty of a member of this caste to mark the sacrificial bull with a hot iron at the time of the post-funeral ceremony.

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CHAPTER IV

POLITICAL LIFE

Many notable changes have been observed in the political life of Basudha in recent years. The most important of these is the emergence of factionalism. Talking about the panchayati raj[1] programme and the attendant increase in factionalism, a member of the Bagdi caste said, "Still it is good. At least we can put our grievances before the public. Before the introduction of the panchayati raj system no one cared to know whether we had anything to say." His feelings were, to some extent, shared by Dasharath Nayek, a member of the non-zamidaar Sadgope caste who said, "It is no good to live in a village where they have a zamidaar. You cannot ignore them. Also you cannot annoy them. You just have to accept what they do to you."

The above remarks of individual members of Basudha are shared by a large section of the villagers who are known as chashi.[2] They consist of the non-zamidaar Sadgope and members of other castes of the village. Until recently, as the above remarks indicate, the zamidaar of the village enjoyed an unchallenged control over the authority structure of the village. The moral (the zamidaar are often referred to as moral) were the rulers and the chashi were the ruled. Although, the recent changes brought

about by the introduction of panchayati raj system did not drastically change this basic pattern of polarisation of power, the absolute control of the moral over the authority structure of the village does not always go unchallenged. In order to have a clear understanding of the political life of Basudha it will be useful to trace the political history of the village since the zamidaar migrated here.

When the zamidaars migrated to Basudha, by virtue of their control over economic resources they became all powerful in the village. "Nothing could happen here without their knowledge or approval. You could not even have a pond dug unless the zamidaar approved it," said Pashupati Ghosh, an elderly member of the village. Though his statement was not entirely unprejudiced, there are sufficient reasons to believe that the zamidaar of Basudha enjoyed an unchallenged authority in the region.

During the British regime, as part of the local self-government when Union Boards[3] were formed, Basudha became the seat of a Union Board and a zamidaar of this village became its President. One member of the same zamidaar family remained in that position for thirty consecutive years. After independence, the community development programme was launched in 1952 and later the panchayati raj system was introduced in 1959 to invite people's participation in the programme. In West Bengal the panchayati raj took the form of a four-tier system -- the zilla parishad[4] at the top, the

gram panchayat[5] at the bottom, and the anchalik parishad[6] and anchal panchayat[7] in the middle. Interestingly enough, three members (cousins) from the same zamidaar family of Basudha occupied the three top-most positions of the anchalik parishad, anchal panchayat, and the gram panchayat. Though in all these three structures there were representatives from different castes or religious groups, and from different walks of life, this was an example of extreme centralisation of power. However, the passage to this centralisation of power was not very smooth.

On May 5, 1958 the gram panchayat was formed in Basudha on an experimental basis and all the eleven members of that body were unanimously elected. These eleven members elected from among themselves a zamidaar as the adhyaksha[8] of the village council and an educated villager as the upadhyaksha.[9] This elected body worked for one year. The next election for the formation of statutory panchayat was held on July 8, 1959. In this statutory body there were nine positions. In a unanimous decision of the villagers, three members were selected from each of the three paaraahs (section or quarter) of the village to fill in those positions. At the time of the initial formation of the experimental panchayat, however, no attention had been paid to the representativeness of the paaraah organisation of the village.

Before the introduction of the panchayati raj system, Basudha was a part of the Guskara Union Board and Shaktipada Ghosh of Basudha was its President. As he had set up a few

commercial and industrial establishments at Guskara he moved there with his family. Naturally the headquarters of the Union Board was also shifted to Guskara. As Shaktipada Ghosh would rarely visit Basudha, one of his cousins, Umesh Ghosh, became the leader of the village. In fact, he was the de facto leader of Basudha even when Shaktipada Ghosh was here as the latter, being the President of the Union Board of Guskara, would mostly remain busy with the extra-village affairs.

When the panchayati raj system was first introduced, neither Shaktipada Ghosh nor Umesh Ghosh were very aware of its implications. Further, as the Union Board continued to function during the experimental gram panchayat period, neither of them took any interest in joining the new body.

The experimental gram panchayat of Basudha was headed by Dinabandhu Mandal, a member of the other zamidaar family of the village. When it was decided to form the statutory panchayat, both Shaktipada Ghosh and Umesh Ghosh became interested in joining the new organisation. Shaktipada Ghosh aspired for the position of pradhan[10] of the anchal panchayat, which was a parallel position to the President of the Union Board, and Umesh Ghosh aspired for the position of adhyaksha. But Dinabandhu Mandal, the earlier occupant of the position, was reluctant to quit the position that he had been occupying for one year. So, the situation became a bit complicated. It got worse when Gopeswar Ghosh (an honours graduate and a

teacher of Guskara Higher Secondary School), another cousin of Shaktipada Ghosh, who was also the Vice-President of the Union Board, aspired for the position of the pradhan. Thus, there were two candidates for each of the positions of pradhan and adhyaksha and all of them were representatives of one or the other zamidaar family of Basudha.

When a contest among the zamidaar became inevitable Tinkari Pal, a dissatisfied non-zamidaar Sadgope and a member of the village council, became active and wanted to snatch away power from the hands of the village zamidaar. With the help of Gunadhar Roy, a Kayastha of the village and a member of the Communist Party of India, he organised a party called chashi party (farmers' party) and decided to take advantage of the situation. Soon they were joined by two other influential villagers Pashupati Ghosh and Haribar Mandal. Ghosh and Mandal were non-zamidaar and belonged to Sadgope caste. Both of them were members of the experimental village council. But when the statutory gram panchayat was formed their names were dropped from the membership of the village council.

We have already said that at the time of formation of the experimental village council the selection of representatives was somewhat arbitrary as no attention was paid to the paaraah organisation of the village. As a result, in the experimental village council there were six

representatives from one paaraah. When it was decided to have equal number of representatives from each section of the village, there were only three positions for the northern section from which there had been six representatives. Further, in order to make a seat for Umesh Ghosh, the de facto leader of the village and a member of the zamidaar family, some members of the previous experimental village council were dropped from the statutory village council. This made them very dissatisfied and they took it as an act of personal insult. As most of them had personal grievances against the zamidaar they made them their target for an attack. Pashupati Ghosh was extremely bitter about it as before abolition of the zamidaari system he was refused permission by the village zamidaar to excavate a pond in the village for raising fish. He was already looking for a chance to take revenge. So, when his name was dropped from the list of members of the village council he became virulent and extended his unalloyed support to the chashi party.

Soon Nemai Haldar, another non-zamidaar member of Sadgope caste joined the party. He attended a meeting where a top communist leader of the state spoke. He was so influenced by the speech that he decided to join the chashi party in order to dislodge the zamidaar from power. These few individuals formed the nucleus and started their campaign against the zamidaar. They made secret contacts with the impoverished chhotalok of the village and raised a

slogan against the begaar system. This tremendously moved the chhotalok as most of them were affected by this system. Soon a large number of them stopped rendering begaar service and joined the chashi party. Within a very short time the village became divided into two factions -- the moral party of the zamidaar and the chashi party of those opposed to the zamidaar.

Pashupati Ghosh, who became very active in his campaign against moral[11], explained to the chhotalok, "During the British regime the moral supported the then British Government and thus humiliated our national heroes like Subhash Chandra Bose and Chitta Ranjan Das. Now we have achieved independence and the moral have overnight changed their robe. Now they are supporters of the Congress Party. They are cheats and cannot be trusted." He further added, "Chhotalok are poor as the moral want them to remain poor. They do not want the poor to become literate and be emanicipated. So they opposed the proposal of setting up a High School in the village."[12] This had a tremendous impact upon the villagers and most of the chhotalok formed a negative opinion about the moral. The solidarity of the chashi party increased when Gunadhar Roy promised to give agricultural lands to the landless villagers provided they supported the chashi party in the village election.

The members of the moral group were not at first aware of these developments. They came to realise the weight of

The last tool the moral decided to use was to disconnect water supply facilities to the members of the chashi party and their followers. As all the village ponds belonged to the moral, the members and followers of the chashi party found themselves in a great difficulty. At this point the village factionalism took a serious turn toward physical violence. Realising this the moral restrained themselves from exerting the pressure fully. Instead, they started litigation cases against members of the chashi party. As a retaliatory action the chashi also did the same and within a very short period the villagers became involved in multiple law suits some of which are still going on.

The Muslim villagers at first tried to remain neutral. But due to economic pressure, most of them had to support the zamiddar. As a consequence of this factionalism most of the Hindu castes, the Santals and the Muslims became divided into two groups.

The chashi party did not propose any candidates for the positions of anchalik parishad and anchal panchayat as they did not have any organisation beyond the village level. They concentrated all their efforts on the election of adhyaksha of the gram panchayat.

Though the moral were pleading for unanimity all through their election campaign, a contest became inevitable and it took the turn of a prestige fight between the moral and chashi party. To avoid clashes, some members of the zamidaar

families were insisting that Sadhan Bazar, the nominee of the chashi party, withdraw his name from the contest. At that time the majority of the members of the village council were supporting Sadhan Bazar. So he remained firm in his decision to contest. When Umesh Ghosh the moral candidate, came to know about it became very furious. At first he tried to persuade Sadhan Bazar to withdraw his name. When this failed Umesh Ghosh personally insulted him by saying,"The moral brought you to Basudha and now you want to rule them. How dare you do that? Being a non-zamidaar you want to rule the zamidaar." Sadhan Bazar felt very much offended at this and this made him more firm in his decision to contest the seat of the adhyaksha. Then Umesh Ghosh tried to win the support of the chhotalok and Muslim members of the village council by making economic concessions to them. This enabled him to bag support of one of the two chhotalok members and the Muslim member. Though this made him almost certain about his victory, Umesh Ghosh still insisted on unanimity in the election of adhyaksha. When all the efforts of Umesh Ghosh failed, Shaktipada Ghosh intervened and was successful in removing Sadhan Bazar from the contest.

Shaktipada Ghosh was closely related to Sadhan Bazar through a marriage. So when he requested Sadhan Bazar to withdraw his name the latter agreed. He did it for two reasons. First, he did not want to make the richest man of the village his enemy by refusing him. Second, when some of his supporters crossed the floor and the chance of

his victory became slim, he thought it would be unwise to get involved in the clash. Thus, at last the adhyaksha of Basudha was elected without any contest. But when the election was over there was no attempt to patch up the differences between the moral party and the chashi party.

Though the chashi party could not push their candidate through the village election they did not give up their political activities. As a result, when any new organisation is set up in the village both the moral party and chashi party contest for occupying power. Consequently, long after the 1969 village election, Basudha has remained divided into two factions. The leadership of the village is to some extent responsible for this.

On the basis of their observation of political and social change in India many scholars have commented on the growth of factionalism in Indian villages. McCormack notes the contrast between the traditional village social system in which "... castes constituted the major groups within the village and only a single allegiance was possible, and the present faction system where dual allegiance to interest-sharing groups is not only possible but common."[13] He attributes the growth of factionalism to the disintegration of the traditional economic system and the increase in direct governmental interference in village affairs. Our observation in Basudha more or less confirms this view. We saw how the

election system of village officials, that was previously unknown in Indian village politics, has contributed substantially to the growth of factionalism.

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FOOTNOTES

1. A new system of village government instituted by the state administration in 1958 in order to decentralise power and authority. The governing unit of the village is known as gram panchayat.

2. A Bengali word which means peasant. Here the word was used to mean non-zamidaar of the village.

3. The first attempt of extending local self-government to villages was made in 1870. Under the provision of the Bengal Village Chaukidari Act of 1870, the country side was divided into unions comprising of about ten or twelve square miles and they were placed under panchayats. These so-called panchayats or councils had only formal existence. The actual governing network of rural local bodies consisting of a district board and a local board was formed as per resolution of Lord Ripon in 1882. See Tinker, Hugh, The Foundations of Local Self-Government in India, Pakistan and Burma, University of London: The Athlone Press, 1954: 39-40 & 52.

4. Zilla is an Arabic word which means district and parishad is a Sanskrit word which means council. So zilla parishad stands for the district council.

5. Gram Panchayat means village council.

6. Anchalik parishad is a block level organisation of elected members. Most of the members are elected from the gram panchayat and some of the members are elected from the

anchal panchayat.

7. Anchal panchayat is an organisation of elected members of an area that coincides with now defunct Union Board.

8. Originally a Sanskrit word means head of an institution. Here it means the chief of the village council.

9. Upadhyaksha is the assistant of the head of an institution. Here it means the assistant chief of the village council.

10. Literally means principal. Here it means the head of the anchal panchayat.

11. A Bengali word which literally means headman. Here the word has been used to mean zamidaar. This is the word the villagers use to indicate the zamidaar.

12. The zamidaar opposed the idea for two reasons. They were not willing to give any land for the school premises. They rather wanted to upgrade the primary school up to a Basic School where importance would lie on vocational training.

13. See McCormack, William, "Factionalism in a Mysore Village," in Leadership and Political Institution in India, by R.L. Park and I. Tinker (eds.), Princeton, N.J.: Princeton University Press, 1959: 440.

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CHAPTER V

PROGRAMMES FOR DEVELOPMENT

History

When India achieved independence in August, 1947, her national leaders found themselves facing many urgent problems that demanded immediate attention. The food problem was one of the most important problems of all. This problem came into focus during World War II, when the "Grow More Food" campaign was launched. With the creation of Pakistan, large surplus food areas were lost to India. As a result the situation became worse. In order to bring about a speedy increase in food production, the Government of India and the state governments undertook numberous agricultural development programmes.

The Department of Agriculture of the Government of India was first established as far back as 1871. The provinces got their separate departments of agriculture around 1882.[1] The community development programme, in which increasing food production is also an important aspect, is of a recent origin.

In 1938 the Indian National Congress set up a National Planning Committee to examine the resources of the country and to prepare plans for India's economic reconstruction. The committee was to explore the means of attaining self-sufficiency for the country and of doubling the standard of living

of the people within a prescribed time limit. Planning assumed paramount importance as the country attained independence. The Planning Commission which formulated India's First Five Year Plan was established in 1950. For bringing about the social and economic development of the villages as a part of the Five Year Plans, the community development programme was designed. At this time the results of the pilot project initiated by Mayer,[2] were used to guide India's future rural development.

The community development programme was formally instituted in 1952. At first fifteen pilot projects were initiated in different states of India in order to determine the suitability of the programmes. But before getting any significant result from the pilot projects, fiftyfive community development projects, each consisting of three community development blocks, were instituted in the same year in different parts of the country.

The emphasis of the projects was on all-round development of rural communities. One of the important aspects of the programme was educating the farmers in improved agricultural techniques and arranging for credit and supplies to bring about an increase in food production. Other aspects of the programme included social education, rural health, public works, rural industries, and improving communication facilities.

The community development movement is not unique to India. There were similar movements in other parts of the globe. Particular mention may be made of the Agricultural Extension Programmes of the United States. There were also several indigenous experiments, of which experiments in Sevagram by Gandhi[3] and in Sriniketan by Tagore[4] deserve special mention. Later experiments such as those in Nilokheri by Dey[5] and in Faridabad by Ghosh[6] made a good contribution toward this movement. Other attempts like the Gurgaon project of Brayne[7], Martandam project of Hatch[8] and the firka[9] development scheme of the state of Madras were important experiments in this direction.

The fifteen community development pilot projects started functioning in April, 1952 and the fiftyfive community development projects were launched on October 2,[10] of the same year, across different places in the country. In December, 1952 it was decided to add fiftyfive more community development blocks. Thus by October, 1953 there were altogether 220 community development blocks (excluding the pilot projects) in the country.

The community development programme was instituted in three stages. The first stage was initiated as an intensive development stage which later was merged with the less intensive national extension service.[11] It was a three-year stage during which a limited programme of development was executed. The second phase that started in 1955

was also a three-year phase of intensive development work. Thereafter the programme entered a post-intensive, continuing stage.

In November, 1957 the Committee on Plan Project, which is also known as the Balwantray Mehta Committee, recommended a revised programme envisaging two stages of longer duration and abolishing the distinction between the less intensive, intensive, and the post-intensive stages. Accordingly, with a partial modification, the stages of the community development blocks were reorganised. The Committee on Plan Projects observed that unless the people and their democratic institutions take full responsibility in the planning and supervision of the community development programme, the movement would never be a success. According to the suggestion of this committee, the panchayati raj programme with a three tier system of decentralisation of power was introduced in 1952.

Under this new system the village itself became the basic unit for development, which was to be brought about through the village panchayat, elected by all adult members of the village. Many powers are delegated to this institution for the implementation of the development programmes at the village level.

The block level organisation, consisting of the presidents of village councils, is responsible for the

formulation and implementation of development plans for the entire block. At the district level, it is the zilla parishad, consisting of the Presidents of anchalik parishads, the members of Parliament, State Legislatures and Legislative Councils (representing the area) with the Collector of the district as its Chairman. Its function is to direct the work of the anchalik parishads within its district. Thus, from the village level to the district all the development activities can be carried out by the panchayat with the help of the government officials.

Until the end of January, 1964 there were altogether 4,877 stage I, stage II, and post-stage II blocks in India covering 5.66 lakh[12] villages and a population of 40.33 crores.[13] In addition there were also 318 pre-extension blocks at that time functioning in the country. Thus, except for certain inaccessible areas, the entire country has been covered by the community development blocks.

Administrative organisation

In the community development programme in India the paramount unit of development activities is the block that covers approximately 100 villages. The Block Development Officer is in charge of a block. He is assisted by different officials who are entrusted with various types of developmental works like social education, cooperation, health, agriculture, and animal husbandry.

On the village level the work is carried out by a multi-purpose worker known as Village Level Worker or gram sevak. He is the key agent of the whole administrative machinery and is specially trained for extension work. He links the villages with the administration and the ideas of the different development programmes are disseminated among the villagers through him.

At the district level, the Deputy Commissioner or Collector is responsible for all the development activities. He is assisted by a number of special officers who are assigned with various development activities. The role of the Deputy Commissioner is largely that of a coordinator of the block programmes.

At the state level, the Development Commissioner is in charge of community development programme. There is a board at the state level to supervise the activities of the Development Commissioner and to advise him in the implementation of the programmes. This is known as the State Development Committee. The Development Commissioner at the state level is the counterpart of the minister at the national level.

Programmes

The major activities covered by the community development programme in Basudha are summarised below:

Agriculture, Irrigation, and Allied Fields

Agriculture was one of the main concerns of the community development programme. Therefore, the programme in Basudha included a variety of agricultural schemes. Under the land reforms movement, land consolidation and land reclamation were the two major schemes. In Basudha, no work was done under land consolidation programme and under the land reclamation programme a loan of Rs. 500.00 was advanced to one of the cultivators in 1961-62.

Under the irrigation scheme there were provisions for advancement of loans for the excavation or reexcavation of tanks and canal distributories, and for the purchase of irrigation appliances. As most of the village lands were covered by the canal irrigation system no such loan was advanced to the villagers of Basudha. Only one duni (a lift irrigation device) and an irrigation pump set were distributed by the block at a subsidised rate. The duni was bought by one non-zamidaar member of Sadgope caste and the pump set was obtained by the most influential zamidaar of the village.

In 1955, when the forest laws protecting trees were implemented the people of Basudha were faced with a new problem of obtaining fuel from the forests. Having no other alternative they began burning a large quantity of cowdung as fuel. Naturally there was a shortage of manure. In order

to compensate for this shortage the block undertook a programme to popularise the techniques of green manuring and chemical fertilisers.

These were not new practices to the villagers. Most of them had some familiarity with both green manuring techniques and chemical fertilisers through the earlier programmes of the agriculture department of the state government, even before inception of the community development project. However, for the purposes of green manuring the block tried to popularise the cultivation of dhaincha (sesbania acculeata) and in the first year of the programme eight kilogrammes of seed was distributed to the farmers of Basudha.

In their programme to popularise chemical fertilisers the block introduced ammonium sulphate, super phosphate, and fertiliser mixtures to the villagers. For small farmers provisions were made for advancing fertiliser loan. In 1960-61 and again in 1963-64 five farmers of Basudha were given such loans.

In order to improve the quality of manure, the block undertook a programme to popularise masonry compost pits among the villagers. Under this programme four farmers of Basudha were sanctioned a lump grant of Rs. 150.00 each and four masonry compost pits were constructed in the village.

The farmers of Basudha were familiar with improved seeds even before the inception of the community development

programme. However, the block also introduced some new varieties of paddy in the village. In recent years, some high yielding varieties of paddy such as Taichung native 1 and I.R.-8 have been introduced. Some improved and high yielding varieties of wheat were also introduced by the block to the farmers of Basudha. These were altogether new to them as the villagers were not familiar with wheat cultivation even half a decade ago. Among the high yielding varieties of wheat, NP-824 was introduced by the block. Improved seeds of sugarcane (C. 0527, C. 0419 varieties) and potato (Rangoon, Nainital, and Malay varieties) were also introduced by the block to the villagers of Basudha.

Under the scheme of popularising vegetable cultivation, about 2000 seedlings of cauliflower, cabbage, tomato and other vegetables were distributed free of cost to the farmers of Basudha.

The block made an attempt to introduce improved agricultural implements and appliances to the farmers. It distributed some agricultural implements like seeddrill, paddy weeder, and duster to one of the farmers of the village at a subsidised rate when the block used his farm land as a demonstration plot for improved methods of cultivation. One sprayer was also given to another farmer of the village at a subsidised price.

In addition, the block recommended certain techniques

of rotation of crops and improved cultural practices such as use of seedlings of proper age, proper spacing, and growing seedlings on a raised seed bed. Demonstrations of these practices were held in Basudha during the period of 1963-66.

The villagers were well informed of need for plant protection chemicals even before the community development programme was started. The block introduced some new varieties of plant protection chemicals and disseminated knowledge of their correct dosages.

Among the various types of credit facilities advanced by the block, twenty-seven farmers of Basudha took advantage of cattle purchase loan and the loan for buying fertilisers, during the period 1953 to 1965. In order to make the credit facilities readily available to the villagers, a multipurpose credit society was organised in Basudha. Seventyfive farmers of the village are members of this credit society. The society has a working capital of Rs.7,626.91.

In order to improve the cattle population eighteen improved goats and one breeding bull were distributed to the villagers of Basudha by the community development block. When the artificial insemination programme was introduced by the block, the bull was taken away to another village. Some improved poultry birds were also distributed to the chhotalok of the village by the block. As these animals and birds were very susceptible to diseases the block also

made arrangement for inoculating them against diseases. During 1958-59, 1050 heads of cattle of Basudha were vaccinated against rinderpest. Between 1965 and 1967, 836 more cattle were also vaccinated against the same disease. During the period of 1965-66, 386 poultry birds were vaccinated against duck plague and during the period of 1965 and 1967, 762 animals received treatment for different diseases from the veterinary dispensary of the block.

For the improvement of the general health of the cattle population the block also introduced an improved type of fodder crop. In 1966, one of the farmers of Basudha cultivated the fodder crop in 0.20 acre of land.

Education and Social Welfare

Before the inception of the community development programme there was a primary school and a library in Basudha. As stated earlier, the school was established by the zamidaar of the village. The library was established by the villagers in 1939 by their voluntary contributions. There was a collection of 300 books in the library.

Since the inception of the community development programme, the library has received an annual grant of Rs.30.00 from the block. It has also received services of the mobile libraries organised by the block.

Before the beginning of the community development programme, there was no permanent building for the library.

When a village zamidaar donated land for the construction of the library building the block organised shramdaan (donation of voluntary labour) and got the building constructed with the help of the village zamidaar.

The village primary school also received a lump grant from the block for the construction of its new building.

With a view to encouraging adult education in the village, an adult training centre was opened by the block. Bijoy Mandal, a non-zamidaar Sadgope of Basudha was one of the candidates for training in that centre. When his training was completed he was appointed by the block to teach the adults of the village. Thus an adult education centre (referred to as night school by the villagers) for males was established in the village. Members of the Bauri, Bagdi, Dome, and Santal communities mainly enrolled themselves for education. The block sanctioned an annual grant of Rs.240.00 for the maintenance of the night school. Further, the school was provided with a petromax (a gas mantle lamp), one cotton mat locally called satranji, and one almirah (closet). For recreation facilities of the villagers, particularly of the adults attending the adult education centre, the block also distributed some musical instruments.

For women's education and welfare, attempts were made to organise a women's education centre in the village. Besides reading and writing, the curriculum of the women's

education centre included sewing, knitting, embroidery, and home economics. This programme was not well received by the village women.

An important role in the programme of women's welfare was played by a trained midwife of the block who visited Basudha. She was supplied with a medicine chest and treated women for common prenatal and postnatal ailments.

Industries and Housing

Programmes were undertaken by the block for developing interest in cottage industries and accordingly, special arrangements were made for providing the villagers with loans to start cottage industries. Arrangements were also made for training of the village youths in cottage industries. As there are not many artisan castes in Basudha the industrial programme did not receive any special attention in this village. The block had also programmes for improvement of rural housing on a self-help basis. This programme also did not get much response from the villagers of Basudha.

Health and Sanitation

In order to promote health and sanitation in the village, the block undertook a scheme for supplementing the supply of drinking water. Formerly there was not tube well and only one masonry well in the village. Under this scheme, six tube wells were installed in different sections of the village. Arrangements were also made for their repairing,

in case of any break down. In addition to the public tube wells, there are a large number of private water resources in the village.

To improve conditions of environmental sanitation, the block had provisions for construction of community bathrooms, community latrines, and smokeless hearths. None of these programmes was very popular in Basudha. The villagers rather preferred to have separate bathrooms and latrines. The block tried to introduce the dug well latrine in the village. This was also not well received. Those who could afford it had their own septic tank latrines. Only one dug well latrine was constructed by one of the farmers of Basudha and that too remains mostly unused as he had a septic tank latrine in the house.

It may be mentioned that the villagers are more used to defecate in the fields than to use a latrine. They do so in part to increase the fertility of the soil.

To develop a consciousness of sanitation needs and practices among the villagers, the block organised "clean your village" drive through shramdaan. At the initial stage some cleaning and construction works were done under this programme. But this did not have a lasting effect.

For raising the general health standard of the locality, a Primary Health Centre was established at Bannabagram and a Subsidiary Health Centre was established at Guskara with

facilities for both indoor and outdoor treatment. The village level worker was also supplied with a medicine chest which would serve the purpose of providing first aid for the villagers.

In an anti-malaria campaign, all the houses of Basudha were sprayed with DDT and tablets of paludrine were distributed to the villagers. In order to prevent small pox, all the individuals of the village were vaccinated. In addition, after implementation of the panchyati raj system a homeopathic clinic was established at Guskara. The clinic receives a sum of Rs.60.00 per month for maintenance from the Guskara Anchal Panchayat, with which Basudha is affiliated.

Transportation and Communications

To improve communications, programmes for restoration of the existing intervillage road system was undertaken. Repair work of the road that connects Basudha with Suri Road was undertaken on the basis of shramdaan. With the cooperation of villagers, the village zamidaar, and the block, the repairing work was done in 1955 and the entire road was paved with bricks and gravels. The block granted a sum of Rs.1000.00 towards the construction of this road.

Programmes for maintenance of the village lanes were also undertaken by the block. But after the implementation of the panchayati raj system, that responsibility was vested

to the village council.

To sum up, though Basudha's participation in various community development programmes seems quite extensive and reasonably successful, a close observation shows that the impact of the programmes as a whole has been rather superficial. Agricultural, health, and transportation and communication programmes were comparatively more successful than the others. A somewhat elaborate discussion of a few agricultural programmes has been incorporated in the next chapter of this report.

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FOOTNOTES

1. Singh, Rudra Datt, "An Introduction of Green Manuring in Rural India," in Human Problems in Technological Change, by Edward H. Spicer (ed.), New York: Russel Sage Foundation, 1952: 55.

2. The concept of multipurpose Village Level Worker was developed in the Etawah Pilot Project. See Mayer, Albert and Associates, Pilot Project, India, (2nd printing) Berkeley and Los Angeles: University of California Press, 1959.

3. See Peyeralal, M., Mahatma Gandhi, Ahmedabad: Navjivan Press, 1959.

4. See Dasgupta, Sugata, A Poet and a Plan, Calcutta: Thacker Spink and Company, 1963.

5. See Dey, S.K., Nilokheri, Bombay: Asia Publishing House, 1962.

6. See Ghosh, Sudhir, Gandhi's Emissary, Calcutta: Rupa & Co., 1967: 229-273.

7. See Brayne, F.L., Better Villages, London: Oxford University Press, 1945.

8. See Hatch, D. Spencer, Up From Poverty, Calcutta: Oxford University Press, 1938.

9. Each district in the state of Madras is divided into taluques, which are in turn subdivided in firkas. A firka is an administrative unit consisting of 25 to 30 villages

and covering an area of approximately 40 to 50 square miles.

10. October 2 is the date of birth of Mahatma Gandhi. As Gandhi was the chief proponent of India's rural reconstruction, his date of bith was selected for launching the community development programme.

11. The Grow More Food Enquiry Committee headed by V.T. Krishnamachari recommended the organisation of national extension service for rural reconstruction. The aim of this agency was not only to provide food, clothing, shelter, health, and recreational facilities to the villagers but also to stimulate a change in the outlook of the people. Accordingly on October 2, 1953 the national extension service came into operation.

12. Derived from the Sanskrit word <u>laksha</u>, meaning "One hundred thousand".

13. Derived from the Sanskrit word <u>koti</u>, meaning "ten million."

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CHAPTER VI

RESPONSE TO DEVELOPMENT PROGRAMMES

In the previous chapter we have described the various programmes that were introduced in Basudha by the community development project. We have also mentioned the few agricultural programmes that were introduced by the Department of Agriculture of the state government before the inception of the community development project. It is not within the scope of this report to study and evaluate all the programmes that were introduced in Basudha by the different development agencies. Here our primary concern is to study the adoption behaviour of the villagers, particularly, in connection with the agricultural innovations. So, we will limit our discussion to the study of some selected agricultural practices.

It is a common experience that response to any development programme is not uniform. When a new programme is introduced, all the individuals concerned do not readily accept it. Some may adopt it quickly, others may accept it after much persuasion by the extension worker, and a third group may not accept it at all. This type of variation in the acceptance of a new practice may be called individual variation. Another type of variation in adoption behaviour has also been observed. This is the variation in the adoption of different new practices. If several

practices are introduced more or less at the same time in a community, it is found that some practices are more readily accepted than others. This type of variation in adoption behaviour may be called variation by practice. Although these two categories are not mutually exclusive, for our operational advantage they may be treated separately.[1]

Variation in adoption of new practices was observed among the farmers[2] of Basudha. It was decided to limit the discussion to agricultural practices only, and for this purpose ten agricultural practices were selected. These were (i) chemical fertilisers, (ii) recommended improved seeds (excluding high yielding varieties), (iii) plant protection chemicals, (iv) high yielding varieties of seeds (v) farm equipment, (vi) green manuring, (vii) compost pits, (viii) improved poultry birds, (ix) recommended dosages of fertilisers and plant protection chemicals, and (x) improved cultural practices.

Before we proceed further we will make a brief review of the agricultural practices that will be dealt with in this section of the report. By chemical fertilisers we mean ammonium sulphate, super phosphate, urea, fertiliser mixtures and others that are recommended by the extension agents. If any of them had been used by the farmers we considered it as a case of adoption. In recommended improved seeds we mainly include improved paddy, wheat, and potato seeds that have been recommended by the

extension agents. We do not include high yielding varieties of paddy or wheat seeds under this category. They have been treated separately. Plant protection chemicals include insecticides, fungicides, and herbicides. Common recommended plant protection chemicals of this locality are aldrin, dieldrin, endrin and follidol. Under high yielding varieties of seeds both paddy and wheat seeds have been included. If some farmers cultivated even a very small plot of land with these varieties, we considered them as adopters.

Farm equipment included improved agricultural implements that have been recommended by the extension agent, e.g. mould board plough, seed drill, paddy weeder, and equipment like duster and sprayer. The irrigation pump has also been considered under this category. In the case of farm equipment our emphasis was more on their possession than on their extent of use.

By green manuring we mean here cultivation of dhaincha (Sesbania acculeata). It is the only variety that has been recommended in this area by the block. If a farmer has cultivated dhaincha he has been counted as an adopter, irrespective of the proportion of farm areas covered by this crop. If the farmer had a masonry compost pit we considered him as an adopter of this practice. Whether all the recommended practices associated with the compost pit are followed by the farmer is not the consideration of this section of the report.

Improved poultry comprises of chicken and duck of improved variety. By recommended dosage we mean whether a farmer follows the recommendations regarding the dosage of chemical fertilizers, plant protection chemicals etc. when he applies them. Improved cultural practices mean use of seedlings of proper age, proper spacing, line sowing, intercultural operations, improved seed beds and other practices irrespective of their extent of use.

Information collected on the above ten practices shows that there is a great deal of variation in the farmers response to recommended practices in Basudha (vide table 12).

Table 12. Percentage Distribution of Farmers by Number of Practices Adopted

(N = 132)

No. of Practices Adopted		Percentage of Farmers
0	...	57.58
1	...	15.91
2	...	10.61
3	...	7.58
4	...	2.27
5	...	3.03
6	...	0.00
7	...	0.76
8	...	0.00
9	...	2.27
10	...	0.00

From the table it is seen that 57.58 per cent of the farmers did not accept any of the above ten practices

and about sixteen per cent of them adopted only one practice. There was no one in the village who had accepted all the ten practices and only 2.27 per cent of the farmers accepted nine practices.

As most of the above practices have been introduced for some time, the above findings suggest that there is, in general, a lack of response to these innovations. There is only a small percentage of farmers in Basudha who are quite susceptible to changes. The majority of the village farmers are laggards.[3]

A great deal of variation was noticed in the acceptance of different types of improved practices (vide table 13).

Table 13. Percent of Farmers Accepting Ten Agricultural Practices (N=132)

Practice	Percent of Farmers Accepting
Chemical fertilisers ..	30.30
Plant protection chemicals ..	25.76
Recommended improved seeds ..	21.21
Farm equipment ..	8.33
High yielding varieties of paddy and wheat ..	6.06
Green manuring ..	4.55
Compost pit ..	1.51
Improved poultry ..	1.51
Improved cultural practices ..	1.51
Recommended dosage ..	0.76

There could be multiple reasons for the variation. These will be discussed in appropriate sections of this report. But before we get into the discussion of that, we would like to examine a few cases of what we called "adoption" here.

From table 13 it is seen that a reasonably large number (30.30%) of the villagers had tried chemical fertiliser and for our operational advantage we have called them as adopters. But a close examination of the situation shows that though chemical fertilisers are quite popular among the farmers of the village, there has not been an unqualified acceptance of this practice in Basudha. It is true that almost a third of the farmers in the village had tried chemical fertilisers but very few (only one per cent) use them in actual recommended dosage. None of the villagers use chemical fertilisers as a basal dose[4] though it is recommended by the block, particularly in the case of paddy cultivation. The geographical condition and the local system of irrigation are, to some extent, responsible for this failure to use basal doses.

The levels of the cultivable lands around Basudha vary from plot to plot. As the lands here are irrigated by canal, the water flows from the lands at the higher level to the lands at the lower level. We were told by the farmers of the village that they do not apply chemical fertilisers as basal dose as they can get washed away by the flow of water.[5]

The extension officers provide the farmers with information of specific dosage of chemical fertilisers for various crops. Only a few farmers seemed to be very inquisitive about this information. For such information most of the villagers depend on their own knowledge or on the knowledge of their neighbours who have reputation as good cultivators.

A great deal of person-to-person variation in the application of chemical fertilisers was noticed. It was also noticed that the same farmer was following different dosage for the same crop in different fields. However, for a general overview, the differences between the local dosage and recommended dosage of important crops of Bamudha could be seen from table 14.

Table 14. Differences between Local and Recommended Dosage of Chemical Fertilisers.

Crops	Fertilisers	Local Dosage (per acre in Kg.)	Recommended Dosage (per acre in Kg.)
Paddy	Ammonium sulphate	12.5 - 20	60
	Oil cake	50 - 100	--
	Super phosphate	--	75
Potato	Ammonium sulphate	100	--
	Oil cake or	500 - 750	--
	Potato mixture	750 (8:8:8)	750(8:8:8)
Wheat	Ammonium sulphate	100	90
	Super phosphate	75	75
	Muriate of potash	--	25
Sugar-cane	Ammonium sulphate	100	400
	Oil cake	500 - 750	--
	Super phosphate	--	250
	Muriate of potash	--	80

It is interesting to note here that the villagers use a huge quantity of oil cake (residue of oil-seeds when most of the oil has been pressed out) as fertiliser, though it is not in the list of recommended fertilisers of the block. We were told that none of the villagers of Basudha used oil cake as fertiliser until about twenty years ago. Shibapada Ghosh, one of the good cultivators of the village got the idea of its use from one of his relatives from a neighbouring village and first introduced it to Basudha. Within a very short period most of the villagers started using it for different crops. At present there is a great demand for oil cake in the village.

Table 14 reveals that various types of chemical fertilisers have been introduced by the block for different crops and different dosages have been recommended for them. But in most of the cases the villagers use the chemical fertilisers in much less than the recommended dosage. Only in the case of wheat cultivation do we see that the local dosage is somewhat close to recommended dosage. We have already said that wheat cultivation is new to this area. The villagers cultivate wheat in small plots of land to meet the requirements of domestic consumption. It is neither a major food crop nor a cash crop to the villagers.

About the application of plant protection chemicals, farmers are rather skeptical. Though 25.76 per cent of the farmers of Basudha use them (table 13), it has not become

a regular practice to do so. To our knowledge, no cultivator in the village has ever used plant protection chemicals as a preventive measure. Farmers of Basudha usually apply plant protection chemicals only as a curative measure and then they expect some immediate results. When they fail to get immediate results, as is often the case with their sugarcane and potato crops, they become skeptical about the utility of the whole plant protection programme.

Recommended improved seeds have been adopted by 21.21 per cent of the farmers (table 13). This does not mean, however, that these farmers always use recommended improved seeds in all the plots of their farm lands. Our observation rather indicates the reverse. Those who use recommended improved seeds do it either for selected few crops or on a few plots of land. According to local methods of cultivation, farmers usually change the variety of seeds for a particular plot of land after every two or three years. It is believed that if a particular variety of seed is used in the same field for consecutive years the rate of production will fall. In this process of change from one variety of seeds to another the farmers often receive new seeds on a trial basis. If they prove successful they cultivate the new seed for two or three years and then look for another new variety.

The above practice of adopting new seeds and then discarding them by the farmers of Basudha after two or three years of use apparently seems to be a non-rational, traditional

behaviour. The farmers' experience, however, shows that they get better agricultural output by changing the variety of seeds than by cultivating the same improved variety for many consecutive years. The agriculture extension officer of Basudha also confirmed this as fact.

Though table 13 reveals that 8.33 per cent of the villagers have used farm equipment, most of these villagers do not own equipment. Thus their extent of use is limited. In the strict sense of the term none of the farmers of Basudha practise mechanised farming. Their degree of application of farm equipment is limited to the occasional use of sprayer, duster, or an irrigation pump.

High yielding varieties of paddy and wheat are recent introductions in Basudha. Considering the time span, their acceptance by 6.06 per cent of the farmers is rather encouraging. But all the farmers who accepted these varieties cultivated them in small plots of land on an experimental basis.

Although green manuring was practised by 4.55 per cent of the farmers of the village, none of them green-manured their crops in 1967. Those who cultivated dhaincha previously for green manuring did it only in a few plots of their farm lands. The majority of their farm area did not receive any green manure.

As far as the compost pit is concerned, only 1.51 per cent of the farmers have masonry compost pits. But as the

masonry compost pits are inadequate to store entire amount of manure, the farmers simultaneously follow the local methods of preservation of cowdung, which is to store them in ordinary open pits.

The acceptance of improved poultry and of improved cultural practices are also very low in Basudha and the lowest percentage of adoption is found in the case of the acceptance of recommended dosage of fertilisers. Most of the poultry birds of Basudha are of the local variety. The few farmers who have improved poultry own only two to three improved birds and a large number of local birds. In the case of improved cultural practices and recommended dosage, it was found that the recommendations were followed on an experimental basis in small plots of lands. These were never tried on a large scale.

Whether the above cases actually represent "adoption" can be debated. The facts, however, suggest that there is a growing interest of farmers for most of the recommended practices and a large number of them are at least at the trial stage of adoption.[6]

Now a question crops up: why is there individual variation and variation by practice in the acceptance of different farm innovations? In order to answer this question let us examine the villagers' reaction to some of these practices closely.

Chemical fertilisers

Different varieties of chemical fertilisers were introduced to the farmers of Basudha by the extension agents of the Department of Agriculture, Government of West Bengal even before the inauguration of the community development programmes. So, the villagers had known about them for a pretty long time. At the initial stage the villagers resisted them because of various reasons. Now a days, though many of the villagers use fertilisers, they react to their use differently.

Bipadtaran Ghosh, a hard working farmer of Basudha, derives most of his income from agriculture. He applied fertilisers in most of his paddy fields but the quantity was about one-fourth of the recommended dosage. He puts his observations below: "When I saw some of the paddy plants turning yellow, at first I thought that that was due to pest-attack. But when I could not see any insect or pest I became sure that the soil has become bad and it was due to application of chemical fertilisers. I am sure, it could not have happened had I followed our traditional way of cultivation and not used chemical fertilisers. I should have used cowdung only. Fertilisers are like poison to the soil. Once you make the earth addicted to them you have to go on supplying them regularly. But one has to be very careful about their use as a slight change in routine or dosage may ruin the natural qualities of the soil. There is always a risk in

using them. I was told that application of lime would be useful to retain the original qualities of the soil. But I don't have that much money to apply lime to my agricultural fields."

Umesh Ghosh, a farmer who is seventy years old, and has a large landholding, puts his observations on the application of chemical fertilisers in the following way: "I use chemical fertilisers and bone dust in my fields. But I don't use them in recommended dosage. Once you feed a field chemical fertiliser it will wait for the same food every year. It is like an addict of opium. I prefer application of cowdung to that of chemical fertilisers. Application of cowdung increases yield for that year and retains strength of the soil for subsequent years. Since the enactment of forest laws, we cannot buy fire wood. So we burn a large quantity of cowdung as fuel. As we don't get cowdung in sufficient quantity for our fields we use chemical fertilisers."

Panchkari Pal, who is fifty two years old and a farmer with substantial landholding comments, "Though we get more crop by using chemical fertiliser I personally don't like to use them. I like to use cowdung. If you apply cowdung regularly the field gets stronger every year and we get more and more yield in the long run. Chemical fertilisers force out the inner strength from the soil. So after harvest of the crop the land does not retain any strength. It is not good. All artificial things are bad.

Cowdung is much better that way. Once you use it properly you get the result for several years. Cowdung never does any harm to the soil whereas chemical fertilisers do. They make the soil sandy. As we do not get sufficient amount of cowdung for the fields, we use chemical fertilisers; but we do not use them in heavy dosage as it is recommended by the officers. We depend on our experience, not on others."

All the three examples cited above suggest that those who are using chemical fertilisers are quite skeptical about their application. They put forward various reasons, most of which imply the farmers' lack of proper knowledge about the practice.

About seventy per cent of the farmers of Basudha have never used any chemical fertilisers. Most of them feel that the application of fertiliser will spoil the fertility of the soil. This belief is stronger among the Muslims than the Hindus. Some of the farmers of Basudha think that application of fertiliser invites insect attack to the field. There are, however, a few of them with very small land-holdings who reported that they could not apply chemical fertilisers as they were unable to buy them.

Plant protection chemicals

About the use of plant protection chemicals also, the villagers are equally skeptical. It has already been stated that the villagers of Basudha use plant protection

chemicals only after the incidence of a pest attack/or a disease. Even in case of pest attack some farmers refused to use them. The reasons are varied. As Sannyasi Deashi remarked, "It is very dangerous to use plant protection chemicals or keep them in the house. They are poison and a slight inaccuracy in the dose will burn the crop. If children put them in their mouth they will die. We will rather prefer to have pests in our fields to use of plant protection chemicals. Last year (1966) one of the farm servants of Shaktipada Ghosh applied them in his field and washed the bucket in our pond. The chemical was so strong that all fish and reptiles from the pond died. We have children in our house. I am afraid of keeping these chemicals in the house or using them."

Kalipada Nayak, who supervises the farms of Shaktipada Ghosh bears a different opinion about the plant protection chemicals. "I got very good results from the use of plant protection chemicals. I was having some difficulty in getting a duster or sprayer from the village level worker on loan. So, I bought these from the block office at a subsidised rate. It is good that we have at least something to fight against the insect attack. Otherwise it was really a menace."

Iyub Sheikh, who has a very small farm of his own and mostly practises sharecropping observes, "I used plant protection chemicals in my sugarcane fields. When the crop

turned yellow the village level worker advised me to use those. But it was of no use. Unnecessarily I had to spend money. The village level worker is a worthless fellow. He does not know anything. The sugarcane plants did not grow any more after the attack. Of course, how can he know about agriculture when he does not have any land of his own to cultivate."

The above are the cases of typical reactions of the villagers of Basudha toward plant protection chemicals. Though most of the villagers resist their use there are some who have found their application very useful. There are farmers, mostly having small land holdings, who think that the pest attack is due to the application of chemical fertilisers. If the use of chemical fertilisers is stopped they believe, that will automatically take care of the pests.

Recommended improved seeds

Though table 13 shows that only 21.21 per cent of the farmers of Basudha use recommended improved seeds, the figures are somewhat deceptive. In fact, most of the times the farmers use some kind of improved seeds. Usually various types of improved seeds are introduced by the block during different years. As a result, for example, some of the improved seeds of 1965 may not be recommended as improved seeds by the block in 1967. But as they remain available in the market the farmers buy and use them and

cannot always make a distinction between recommended and non-recommended seeds. As the percentage given in table 13 has been calculated on the basis of replies of our questionnaire. the figure is low. The farmers of Basudha, in general, do not have any complaint against improved varieties of seeds except in case of some paddy seeds. They were disliked as the taste of these new varieties was not always good. Nemai Haldar observed, "N.C 678 variety of paddy is good as it gives more yield. But its taste is not good and the parched rice made of this variety of paddy is also not good. Still we grow this variety as we have to give rice to our munish. They do not care about the quality of rice."

Farm equipment

About eight per cent of the farmers of Basudha have used improved farm equipment. As stated earlier, very few of them own the equipment. The usual practice is to borrow the equipment from the village level worker when necessary. But this is not largely practised as the farmers have to send a labourer to get the equipment and another to return it. The cost of labour being very high in this area small farmers cannot afford to engage any labourer for getting the equipment and returning it back. Another factor that has made the farmers skeptical about this practice is that after borrowing the equipment they often found that it was not in order. The village level worker confirmed this as fact.

Due to various preoccupations he could not often get time to check whether the equipment was in order, particularly in the seasons of its heavy demand.

A few of the farmers who have sufficient amount of land holdings have bought a few items of equipment and use these when necessary. Some of the cultivators got farm equipment from the community development block as their lands were used by the block as demonstration plots. None of them has ever used any of this equipment, however. To quote Nemai Haldar, "We were given these implements but they never taught us how to use them. I have seen their use in the demonstration plot. If we have to use them, I guess, we will have to change the entire system of cultivation. It is not possible as our farm servants are not familiar with the new techniques. On the contrary, adoption of these new techniques will involve more investment of money. Most of our farmers cannot afford to do that."

High yielding varieties of paddy and wheat

Of all the recommended practices known in Basudha these are the latest to be introduced. Though we find that 6.06 per cent of farmers of the village have cultivated high yielding varieties of paddy and wheat, most of them did it on an experimental basis. Kalipada Nayek, the gomostaa of Shaktipada Ghosh, cultivated them first. He was not very interested in cultivating these varieties.

As he puts, "I am not in favour of cultivating these high yielding varieties. Our farm servants find it very difficult to follow the specifications associated with these varieties. Further, our lands are also not very suitable for their cultivation. They can be cultivated in do land (sandy loam soil with assured irrigation facilities) only. There are other difficulties also. Cultivation of these varieties needs more labour input. As we have a tremendous shortage of labour particularly during transplantation and harvesting seasons our problems become multiplied. We have to engage more labourers than what we ordinarily require. Again, as these are early varieties, their flowering begins when there is no other standing crop in the fields. Naturally all insects, grasshoppers, and birds attack them and destroy the crop. This happened in the field of Dasharath Nayek. He did not get anything but straw. The straw of these varieties of paddy is not good either. It is hard and very short and the grains are also coarse. The high yielding varieties of paddy are not good for the local system of threshing either. A large portion of the grains remain with the straw after threshing. If we want to get them the cost of threshing will be doubled. We are not very fond of investing more money for an uncertain cause. We are villagers and to us a bird in hand is better than two in the bush. Still I cultivated high yielding varieties of paddy and wheat because Bhaktipada Ghosh asked me to do that. He is very close with the officers of the

community development block and often he gets "this" or "that" facility from them. Naturally when the officers want to experiment on some thing about agriculture they come to him. So when I was asked I agreed to cultivate these as I wanted to oblige the officers."

There are a few other villagers who have cultivated a high yielding variety of paddy. Rakhahari Ghosh, who has a small farm land and has a bad reputation as a lazy farmer of the village, once cultivated IR-8 variety of paddy. He did this because he ran out of other paddy seedlings at the time of transplantation. As he could not find any other seedlings available he planted IR-8 variety. But he did not use any fertiliser or manure in the field, nor did he follow any other recommendations made for IR-8 paddy. Sitanath Shaw, who also once cultivated these varieties was not very interested in cultivating them. He also ran out of seedlings. As he got IR-8 seedlings from Kalipada Nayek free of cost, he cultivated them. He also did not use any chemical fertiliser or follow other recommended methods.

Green manuring

Though the technique of green manuring was introduced in the village long ago, it has received very little acceptance from the villagers, whereas some of the practices that were introduced later got better acceptance.[7] In order to understand why this practice did not get better response it is necessary to know under what circumstances this was

cultivated. In Basudha, Hosh Ghosh cultivated dhaincha for several years for green manuring purpose but recently discontinued it.

He observes, "I cultivated dhaincha for three years and got good results. The fields where I cultivated them became fertile and gave better yield. In spite of that I had to discontinue its cultivation. There are two reasons for that. Though we have canal here it supplies water for paddy cultivation only. Naturally during other seasons we have to depend on rain water. During the first year of my dhaincha cultivation we had a favourable rain fall and I got very good result. During the second year we had a late rain. As a result we could not plough the soil until it was late, and the plants grew very high. I had to employ labourers to clear them from the fields. Still I would have cultivated them. But I had another problem. In our area it is the practice that after harvest of paddy the cattle of the village and neighbouring villages are taken to the fields for grazing. As no other crop is grown in the chali lands (canal irrigated low lands with clay loam soil) cattle move there freely. But when I cultivated dhaincha after the harvest of paddy I had to tell others not to tend their cattle there. But the villagers did not listen to me. As it is the age old practice they asked me to fence my plots. My plots are located at different places. So it was physically impossible for me to fence them. As a result, the crop was damaged by cattle and I had several

quarrels with my neighbours. At that time the factional feeling in the village was very tense. When I found that it might lead to physical violence I gave up the cultivation of dhaincha."

Sadhan Bazar, who also did not cultivate dhaincha told, "I noticed how much difficulty it was for Umesh Ghosh to cultivate dhaincha. He took every care and got good result. But still he had to give it up. Though I thought it would be useful to cultivate dhaincha I did not cultivate them. Who likes to invite troubles?"

Compost pit

The programme of construction of masonry compost pit got rather poor acceptance from the villagers. Sadhan Bazar who has a substantial amount of farm land and got a masonry compost pit constructed remarks, "It is good to have a masonry compost pit though I am not so sure that the quality of manure of a masonry compost pit is in any way better than that of an ordinary compost pit. But the problem is that we have too many bullocks and cows and one masonry compost pit cannot store the entire volume of cowdung that we have. As the storage capacity of such a compost pit is fixed, it is not very suitable for our purpose. Otherwise we will have to have several of them constructed. That means investment of more money and space. You know, there is a great scarcity of space in our village."

Anwar Seikh, who has a small farm land, told, "We are poor cultivators. How can we afford to have a pucca (masonry) compost pit when there is no pucca house for ourselves to live?"

Improved poultry

The acceptance of improved poultry is also very low in Basudha. The cultural factor is principally responsible for this. The upper caste Hindus, according to tradition, are not supposed to raise chickens. They are not supposed to eat them or their eggs. Now a days the male members of the upper castes have started eating chicken and eggs, but they are never taken inside the kitchen. As it has already been stated, the chickens are raised in Basudha mostly on the paalaa system of raising livestock on shares. Ducks could have better acceptance in the village because there is no cultural prohibition against their raising. In fact, there are hundreds of local varieties in the village. However, as the community development block distributed only improved chickens, some chhotalok members could enjoy the benefit.

But as Lal Soren observes, "The improved varieties of chicken have less resistence. They are more susceptible to diseases and cannot take care of themselves. One has to feed them. As we could not take that much care most of them died. Our own way of raising chickens is very

different. Practically we do not take any care of them. They just grow. As we are agricultural labourers we are left with very little time to look after our chickens. It is not possible to maintain a food chart for our chicken either when there is no regularity in having our own food."

Improved cultural practices

The acceptance of improved cultural practices in Basudha is very poor. As most of the farmers depend on hired agricultural labourers who are very not/familiar with these practices, it becomes difficult for the farmers to accept them. If the need of the local labourers could be met from within the village or neighbourhood the problem would be less. As the farmers depend on labourers from outside the state the problem is multiplied. Dwijapada Ghosh observes, "We cannot work in the way the community development block suggests. We have our own methods and our labourers have no problem with that. We depend on labourers from Dumka who do not know anything about these improved cultural practices. We could probably teach them provided one batch of labourers would work for us regularly. But there is no certainty about that. In this situation if I press them too much to follow the new techniques they may refuse to do my work. I tried it several times and failed."

Umesh Ghosh, who never tried these practices said, "Can anybody follow these practices if he has 100 bigha

of land? This is not practical, particularly when we have to depend on outside labourers. It is better we don't try it at all."

Recommended dosage

This has received minimum acceptance of all the ten practices we investigated. About this both big and small farmers are of same opinion that they cannot take any risk. "We live in a precarious economic balance. It is better we should be contented with what we have. If the crop fails one year we will die. We cannot afford to make any experiment." Thus, we find only about one per cent of the farmers of Basudha follow recommended dosage and that too in only one or two small plots of lands.

An analysis of the above facts shows that a series of factors are responsible for the non-acceptance or partial acceptance of the farm practices that are under our discussion. They include physical factors, situational factors, economic factors, cultural factors, and the farmers' lack of proper knowledge about the recommended practices. The physical and situational factors include scarcity of local labourers, unsuitability of soil, and lack of proper irrigation facilities. They have mostly affected the acceptance or use of the chemical fertilisers, plant protection chemicals, farm equipment, high yielding varieties of paddy and wheat, green manuring, compost pit, and improved cultural practices. The economic factor has largely affected

the acceptance of chemical fertilisers, farm equipment, and compost pit. The cultural factors include simple habits and accepted social norms, beliefs, social structure, world view, and values and attitudes of the farmers. They have affected the acceptance of plant protection chemicals, recommended improved seeds, high yielding varieties of paddy and wheat, green manuring improved poultry, and recommended dosage. In addition, lack of proper knowledge of the farmers has affected the acceptance of chemical fertilisers, plant protection chemicals, high yielding varieties of paddy and wheat, and compost pit.

Apart from these there are some other factors that influence the adoption behaviour of the farmers. In order to have an insight, we will examine the characteristics of farmers in the next chapter of this report and try to find out how they influence adoption behaviour of the individuals.

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FOOTNOTES

1. Similar categories were made by Bose, Santi Priya and Satadal Das Gupta, The Adoption Process, Extension Bulletin No.1, Calcutta: Department of Agriculture, Govt. of West Bengal, 1962: 8-14.

2. Here by farmers we mean both individuals who own some cultivable lands and themselves supervise agricultural activities or the sharecroppers who do agricultural works themselves.

3. For definition see Rogers, Everett M., Diffusion of Innovations, New York: The Free Press, 1962.

4. Fertilisers of manure that are applied to the field at time of or before sowing of seed.

5. The farmers of Basudha were right to some extent about this. It was confirmed by the agriculture extension officer of the block that some varieties of chemical fertilisers can get washed away even twentyfour hours after their application.

6. For definition see Rogers, op. cit., pp. 81-86.

7. Similar observations have been made by Basu. See Basu, Sunil Kumar, "On Diffusion and Adoption of Farm Traits," Bulletin of the Cultural Research Institute, Vol.3, No.1, 1964: 50.

...

PART FOUR: ADOPTION OF INNOVATIONS

C H A P T E R VII

CHARACTERISTICS OF FARMS AND FARMERS

In the previous chapter we have seen that various agricultural practices received different degrees of acceptance by the farmers of Basudha. We have also reported some of the reactions of the farmers to various recommended practices. In this chapter we will examine the various physical and situational factors, and personal characteristics of the farmers, that can influence adoption behaviour. Under physical and situational factors we included size of land holding of the farmers, quality of land owned by them, type of ownership of land, degree of fragmentation of the land holdings, and availability of labour. Under personal characteristics of the farmers we will examine their age, literacy, family structure, family size, caste, socio-economic status, and the degree of extra-village contact.

Size of land holdings

Size of land holdings of the farmers is an important variable in the study of adoption of new practices. It can influence adoption behaviour of an individual in various ways.[1] For example, a farmer having very small amount of land holdings may seek off-farm employment or work as agricultural labourer to supplement his family income. This may force him to neglect his own land. Also, a farmer with a small land holding may not be willing to take the risk of adopting new

practices.

In order to determine whether there is any relationship between farm size and adoption behaviour we divided the adopters of Basudha into two categories. Those who had twentyfive bigha (ten acres) of land or more were placed in one category and those who had less than that were placed in another category.[2] It was found that cent per cent of the farmers who adopted five practices or more (of the ten practices reported in Chapter VI) had at least twentyfive bighas of land. Those who adopted less than five practices include farmers of either type, that is, those who have more than twentyfive bighas of land and those who have less than that amount. Only twenty per cent of those who adopted less than five practices have more than twentyfive bigha of land and the remaining eighty per cent have less than that amount. This shows a relationship between the size of land holdings and the degree of adoption and suggests that those who have large land holdings are better potential adopters than those who have small land holdings.

The relationship of farm size and the degree of adoption is recognised by the villagers. As it was observed by Mazid Mandal a Muslim farmer of Basudha,"The village level worker is for the big farmers. He does not come to us. Whenever he comes to the village he goes to them and talks with them. Naturally they know about every new programme and the benefits. As we are small farmers the government

does not care for us."

The village level worker confirms this relationship when he says, "It is not possible for me to meet each and everyone in the village. Usually we go to those farmers through whom we can push our programmes. The farmers seldom ask for anything out of their own interest. When a new programme comes, in order to fulfill the physical target within the specified time, we push it through the big farmers. We know it is difficult to push anything through the small farmers. We have to work according to the directions of the government and that is why there are so many complaints."

The small farmers have limited control over economic resources. So, they are generally apathetic toward the new programmes. As we were told by Haripada Mallik of Basudha, "I do not follow any recommended practice. I have only three bighas of land and we are eight members in the family to eat. Even if I follow all the recommended practices I won't be able to produce as much as it is required for my family. And where shall I get the money to buy fertiliser? So I work in the grocery shop of my brother-in-law at Deasha (a neighbouring village). By some means or the other I have to feed my children."

The above example shows that when the farmer has a very small land holding he may feel compelled to seek

employment elsewhere to maintain his family. As a result, in spite of the knowledge of recommended practices that he may have, he neglects to adopt them. His limited economic means also contributed to this to a considerable extent.

Most of the villagers have a distrust of government officials and the public programmes. Farmers having small land holdings find it risky to adopt any new practice. They generally live in a precarious economic balance that can be upset by failure of a single crop. So they do not like to try any new thing. This was reflected in the comment of Rahaman Seikh, "How can I take the risk of applying insecticides in my paddy field? I have only five bighas of land and I somehow manage my family. The insects can destroy some crops but the insecticides can destory all of them. If it happens who will feed us?"

The above discussion indicates a positive relationship between the size of land holdings and favourableness toward adoption. The relationship is not always one-to-one, however, and in some cases factors other than farm size influence adoption behaviour.

Quality of land owned

The quality of land owned by the farmers is an important factor in an adoption study. We observed in Basudha that there is a direct relationship between the quality of land owned by the farmers and the nature and degree of adoption

of agricultural practices by the farmers. We were told by both the agricultural extension officer and the villagers that sandy loam soil having assured irrigation facilities is very suitable for cultivation of the high yielding varieties of paddy. This kind of land is called do land in Basudha. Soil analysis reports of the area show that there are three types of soil in the village. They are shali, shuno and do. Most of the village lands are clay-loam locally known as shali. They are unsuitable for the cultivation of high yielding varieties of paddy. The other two types are loam and sandy loam, locally called shuno and do respectively. Only a small proportion of village lands belong to the last two categories. Some farmers who have do land with assured irrigation facilities cultivate high yielding varieties of paddy in some of these plots. There are other farmers who, in spite of their desires to so, could not grow these varieties as they do not own the right kind of land for the cultivation of high yielding varieties of paddy.

"I would like to try Taichung paddy if I had do land. But I have none. There is a great scarcity of do land in this village," said one of the Muslim farmers of Basudha. In fact, there is a great demand for do land in the village as these are suitable for vegetable and wheat cultivation also.[3] The village level worker of the area once remarked in this connection, "In spite of many high hopes among the top officials I have some doubt about the prospects of high

yielding varieties of paddy. We cannot ask the farmers to cultivate them when they do not have any suitable land."

Type of land tenure

The type of ownership of land also influences the adoption behaviour of the farmers. It was found in Basudha that owner-cultivators accepted proportionately more improved practices than the sharecroppers. Seventytwo per cent of the owner-cultivators adopted some kind of recommended practices. Among the sharecroppers only four per cent adopted some recommended practices.[4] There is a general impression among the villagers that sharecroppers have an apathy toward lands of their manib. They do not take proper care of such lands as they get only a half or one-third of the total yield. During our stay in the field Umesh Ghosh once pointed out some plots of land where potato was cultivated. They were full of weeds. Umesh Ghosh said, "They must be cultivated by sharecroppers. Otherwise there could not have been so many weeds here." Later on we found that those plots actually were cultivated by sharecroppers.

The sharecroppers appeared to be interested in cultivating more land carelessly than cultivating less land carefully. They were less enthusiastic about recommended varieties than owner cultivators. Though the number of sharecroppers in Basudha is quite high (vide table 6), only four

per cent of them have adopted any of the improved practices. All of these adopters are sharecroppers of Kalipada Nayek, who himself adopted nine of the ten improved practices we investigated. It was because of his interest and pressure that the sharecroppers accepted the recommended practices. Where there is no such pressure, the sharecroppers seldom do anything out of their own initiative.

Regarding this, Kalipada Nayek once remarked, "Why should we blame the sharecroppers who does not own the land. They are poor and illiterate. How can they do anything unless we guide them?"

Fragmentation of land

The lands around Basudha are highly fragmented. Table 7 gives some idea about the extent of fragmentation of the village land. We found no perceptible differences among the cultivators in extent of fragmentation.

If the lands around Basudha were not so much fragmented, this might facilitate agricultural operations, particularly irrigation and application of chemical fertilisers and plant protection chemicals. The cost of production also might be less. But none of the villagers seemed to be very concerned about the fragmentation problem. In the previous chapter we have noted that Umesh Ghosh discontinued the cultivation of dhaincha (green manure crop) in spite of good return, because of the hazards of uncontrolled

grazing. If his lands were not fragmented and scattered he could fence the area and cultivate dhaincha.

Another indirect influence of fragmentation could be on the application of chemical fertilisers as a basal dose. As we already stated, none of the farmers of Basudha use chemical fertilisers as basal dose. They are afraid that the fertilisers will be washed away when the water flows from a higher level to a lower level. If individual farmers had contiguous plots they could easily erect embankment around their respective plots and apply chemical fertilisers. But none of the farmers ever mentioned anything to us about the fragmentation problem.

Availability of local labour

We have already stated that in Basudha there is a great scarcity of labour particularly during the transplantation and harvesting seasons. At that time the farmers mostly depend on inmigrant labourers. As the inmigrant labourers are not used to improved practices viz. line sowing, they do not like to work according to the specifications of the extension agent. This affects the adoption of improved cultural practices, particularly those that are associated with the cultivation of high yielding varieties of wheat and paddy. They dislike it more because if they follow line sowing method, the labourers cannot cover as much land as can be done by following the local method. We were told by Lakhan Singh, an inmigrant labourer, "We

put in the same amount of work no matter whether we follow the local method or the line sowing method. But the manibs think that we cheat them when we do line sowing. For local method four munish are enough to transplant one bigha of land. But in line sowing method it requires at least six or seven labourers per bigha. We don't want to get this blame unnecessarily. It is better we don't do line sowing". This shows that trained labourers who are willing to follow improved practices are also an important factor in the adoption of innovations.

Personal characteristics

Adoption studies, particularly in the Western countries, "have revealed close correlations between the personal characteristics and social situation of cultivators - i.e., age, level of education ... etc., and the adoption of scientific agricultural practices."[5] In India where situational factors create major barriers against adoption and where agricultural service and supply channels are not yet properly developed, the influence of personal characteristics of the cultivators on adoption of new practices seems to be comparatively less. In order to examine whether there is any relationship between personal characteristics of the farmers and their adoption behaviour, the age, literacy, family structure, family size, caste, socioeconomic status, and extra-village contacts of the farmers of Basudha were studied. For the purpose of our analysis we compared

adopters who adopted one or more of the ten practices that we discussed in chapter VI with non-adopters who did not accept any of the ten practices. They consist of the same 132 farmers we have discussed before.

Age

Table 15. Percentage Distribution of Age Groups of Adopters and Nonadopters.

	Age Group		
Farmer Categories	17-55	56 and over	Total
Adopter (adopted one or more of 10 practices) N = 56	82.14	17.86	100
Nonadopter (adopted no practices) N = 76	85.71	14.29	100

It is generally expected that farmers who are younger in age would be more prone to accept change. There are two reasons behind this. First, people who are younger in age have a natural inclination toward taking risks. Second, younger people are expected to have more outside contact that would influence their adoption behaviour. They are also more prone to make various kinds of experiments. In order to test the validity of this assumption we sorted out the age group categories[6] of adopters and nonadopters and the results are given in table 15.

The table shows that age is not related to adoption

behaviour as there is only a slight difference in the making of the age groups between the adopters and nonadopters.[7]

Level of Literacy

As far as the level of literacy is concerned some differences were found between the adopters and nonadopters. The results have been given in table 16.

Table 16. Level of Literacy of Adopters and Nonadopters.

Farmer Categories	Level of Literacy				
	Illiterate	Primary (I-IV)	Secondary (V-XI)	Under Graduate	Graduate
Adopters (N=56)	14.28	44.64	37.50	1.79	1.79
Nonadopters (N=76)	28.59	66.66	4.75	--	--

The table shows that most of the nonadopters were either illiterate or literate only up to the primary level.[8] Only 4.75 per cent of the nonadopters had attained literacy up to the secondary level. The adopters, on the other hand, had a wide range of literacy level and only 14.28 per cent of them were illiterate. Of the adopters, 37.50 per cent had attained literacy up to the secondary level and there were also some undergraduates and graduates among them. This indicates a positive relationship between literacy and the adoption behaviour.[9]

Literates in general are more prone to accept change than the illiterates. But our close observation in Basudha shows that none of the undergraduate and graduate representatives of the adopters belong to the category of high adopters. Among the literates, those who have education only up to the secondary level are more susceptible to agricultural changes than the higher qualified individuals.

There are reasons for this positive relationship. As literates are more knowledgeable, they are in a better position to understand the complexity of modern agricultural practices than illiterates. The literates in Basudha who have higher education beyond the secondary level are rather apathetic toward agriculture as such, as most of them are engaged in some other economic pursuits. All of the literates beyond the secondary level are engaged in off-farm employment and practised farming as secondary occupation.[10] This suggests that their off-farm job has some negative influence on their adoption behaviour.

Family Structure

Table 17 shows the distribution of adopters and non-adopters according to family type.

Table 17. Distribution of Family Types between the Adopters and Nonadopters.

Farmer Categories	Nuclear	Extended	Miscellaneous
Adopters (N=56)	58.92	37.50	3.58
Nonadopters (N=76)	74.28	25.72	--

As far as the family type is concerned we did not find any major difference between the adopters and non-adopters. Both of them have a large proportion of nuclear families. Table 17 shows that the adopters have proportionately more extended families than the nonadopters. This suggests a positive correlation between extended family and the degree of adoption.

As the extended families of Basudha have more control over economic resources, it is likely that they can afford better the risk of trying new practices. To the villagers in general, acceptance of a new practice is still an economic gamble as they are never sure of the result. They do not trust the extension officers who are assigned with the duty of introducing new practices. In support of this distrust they narrated how a late variety of paddy introduced by the village level worker turned up to be an early variety, resulting in a great difficulty to the cultivators. However, as the economic responsibilities in an extended family are shared by the constituent units, the risks involved in adoption of new practices are distributed. As a result individual members of an extended family are more inclined to accept a new practice.

Family Size

As far as the size of family is concerned no important difference was found between the adopters and nonadopters. The results can be seen from table 18. Family size in

Basudha was not related to adoption behaviour.

Table 18. Distribution of Family Size between Adopters and Nonadopters

Farmer Categories	Family Size	
	5 persons or less	6 persons or more
Adopters (N=56)	33.94	66.06
Nonadopters (N=76)	28.59	71.41

5. Caste

Thus far we have not considered the effect of caste upon adoption behaviour. Though Patnaik[12] found caste to be an important variable exerting a negative influence on agricultural adoption, and Roy et. al.[13] found caste status to be positively related to adoption levels, we decided not to include caste as such into account. This is because in Basudha the control over economic resources, particularly over agricultural land, is enjoyed by the members of a single caste, the Sadgope.[14] In Basudha most of the adopters also belong to Sadgope caste. As they own three-fourth of the village lands it is difficult to determine whether it is due to caste or the ownership of land that they have adopted the improved practices.

Socioeconomic Status

Though we rejected caste structure as an important

factor for determining adoption behaviour, we did not rule out the possible influence of socioeconomic status of the farmers on their adoption behaviour. For our operational advantage we worked out a socioeconomic index of each farmer of Basudha. For construction of these indices an indirect measure was used, mostly depending on the villagers' own classification. All farmers of Basudha were given a score on the basis of the nature of the position they occupy in the social, economic, and political components of the structure of the village. Thus, every individual farmer got three scores. By adding them up and then dividing the total score by three we calculated an individual socioeconomic index. Then the average socioeconomic index of the farmers of Basudha was worked out. Farmers whose socioeconomic indices were higher than the average were grouped as high and those whose socioeconomic indices were lower than the average were grouped as low. Table 19 shows the differences of socioeconomic status between the adopters and non-adopters.

Table 19. Percentage Distribution of Adopters and Non-adopters on the Basis of Socioeconomic Status.

Farmer Categories	Socioeconomic Status	
	High	Low
Adopters (N=56)	58.92	41.08
Nonadopters (N=76)	19.04	80.96

Most of the farmers of Basudha who adopted some recommended practices have high socioeconomic status. Conversely, among the nonadopters 80.96 per cent have low socioeconomic status.

The results of table 19 suggest that farmers having high socioeconomic status are more prone to accept recommended practices than the farmers of low socioeconomic status. These results agree with the findings of Roy et. al.[15] and Lionberger.[16] As farmers with high socioeconomic status are apt to have more control over economic resources and greater involvement in village affairs, it is quite likely that they will have closer connection with the extension agent than the farmers who have low socioeconomic status. Thus it would be quite likely that they would accept more recommended practices than the farmers of low socioeconomic status.

Extra-village Contacts

It was assumed that farmers' contact with extension agents and urban areas would have some influence on their adoption behaviour. In order to determine the degree of influence of these factors, relevant information was collected from the farmers of Basudha. On the basis of our data, we calculated an index for every farmer that represents both extension agent contact and urban area contact.[17] Every individual farmer was given separate scores for his contact with the extension agent or agency and for contact

with the cities. However, the nature of contact was not taken into account. By adding up these scores and then dividing the figure by two we worked out the extra-village contact index of individual farmers. Then we calculated the average scores of the village farmers. Those who obtained more than the average score of the village were classified as farmers of high extra-village contact. Those who got less than the average score were grouped as farmers of low extra-village contact. The results would be seen from table 20.

Table 20. Percentage Distribution of Adopters and Non-adopters on the Basis of Extra-village Contact.

Farmer Categories	Extra-village Contact	
	High	Low
Adopters (N=56)	55.36	44.64
Nonadopters (N=76)	19.04	80.96

Table 20 shows that among the adopters 55.36 per cent have high extra-village contact and 44.64 per cent have low extra-village contact. Among the nonadopters the respective proportions are 19.04 and 80.96. From the results we can conclude that there is a strong tendency among the farmers of high extra-village contact to adopt new agricultural practices. As extra-village contact widens the knowledge of the farmers about the outside world, a positive relationship between extra-village contact and degree of acceptance of recommended agricultural practices seems logical.

Throughout the discussion of this chapter we have endeavoured to find out the relationship of characteristics of farmers with the degree of their adoption of recommended agricultural practices. We found several characteristics that have a positive relationship with the degree of adoption and are likely to influence the adoption behaviour of the farmers.

As far as the physical and situational factors are concerned we found that the size of landholdings, quality of land owned, type of land tenure, and availability of labour have a positive relationship with the adoption behaviour of the farmers. Though in some cases their relationship was not direct there are evidences of their influence on the adoption behaviour of the farmers. However, the above facts suggest that owner-cultivators having large landholdings are more likely to adopt recommended practices than the small cultivators or sharecroppers provided there is availability of labour and suitable lands. The negative influence of fragmentation of land on adoption behaviour was apparent to us but the farmers seem to be unaware of that.

So far as personal characteristics are concerned, we did not find any relationship between adoption and farmers' age, family structure and family size. Literacy, socioeconomic status and extra-village contact of the farmers were found to be positively related to adoption

behaviour.

Our observation in Basudha, however, indicates that there is no one-to-one relationship between the level of literacy and the degree of adoption. The degree of adoption increases with the literacy up to the secondary standard and then onwards the rate of adoption drops off. This suggests that the farmers with high socio-economic status and high extra-village contact are more prone to accept recommended practices than the farmers of low socioeconomic and low extra-village contact provided they are literate up to the secondary standard. If they are illiterate or have a higher education they are less likely to accept new practices.

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FOOTNOTES

1. Hodgdon and Singh found that the size of landholdings can influence adoption behaviour of the farmers in seven different ways. For details see Hodgdon, Linwood L. and Harpal Singh, Adoption of Agricultural Practices in Madhya Pradesh, Hyderabad: National Institute of Community Development, 1966: 10-12.

2. The division is rather arbitrary. To some extent we followed the villagers' own classifications. The villagers of Basudha divide themselves into three categories on the basis of ownership of land, e.g. landless, small farmers, and big farmers. Those who own less than twenty-five bigha of land are thought of as small farmers. Those who own twentyfive bigha of land or more are considered to be big farmers. A bigha in Basudha is equal to two-fifth of an acre.

3. When the shali lands with irrigation facilities were selling at the price of Rs.2,000.00 per bigha in Basudha, do lands were selling for Rs.16,000.00 per bigha.

4. This finding is opposite to what has been observed by Roy, et. al. in connection with the general cultivators. See Roy, Prodipto, Frederick C. Fliegel, Joseph E. Kivlin, and Lalit K. Sen, Patterns of Agricultural Diffusion in Rural India, Hyderabad: National Institute of Community Development, 1968: 69.

5. Compare Hogdon, Linwood L. and Harpal Singh, op. cit., p. 16.

6. To be consistant with table 2 we used the same age group categories here.

7. This agrees with the findings of Hodgdon and Singh. Hodgdon, Linwood L. and Harpal Singh, op. cit., p. 18. Also compare Roy, et. al., op. cit., pp. 63-64.

8. To be consistent with table 4 we use the same categories of literacy here. For the definition of literacy which we have used in this report see footnote number 20 of Chapter I.

9. This agrees with the findings of Roy, et. al., op. cit., p. 64.

10. Compare F.C. Fliegel. "Aspirations of Low Income Farmers and their Performance and Potential for Change." Rural Sociology, 1959, 24: 205-214. Also see, Roy et. al., op. cit., pp. 64-65.

11. Roy, et. al., hypothesised that structurally complex families will be lower in adoption as there would be some difficulty in making adoption decisions in such families. Our data show that the roles of individual members in an extended family in Basudha are well differentiated and important economic decisions are made by the male head of the family locally known as kartaa. Though from time to time he can consult other adult members of the family,

his decision is hardly met with any challenge. See Prodipto Roy, et. al., op. cit., p.65.

12. See Patnaik, N., "Adoption of Agricultural Practices in a Peasant Community in Orissa," in Selected Readings on Community Development, by T.P.S. Chawdhari (ed), Hyderabad: National Institute of Community Development, 1967: 93.

13. See Roy, et. al., op. cit., p. 67. Also see Bose, Santi Priya, Eadpar: A West Bengal Village, Calcutta: Dept. of Agriculture, Govt. of West Bengal, 1963: 36-40, 55.

14. Bose, in his study of a West Bengal village, concluded that caste structure had influenced the adoption of scientific agricultural practices. But his findings also show that caste alone was not that important a factor as most of the adopters belong to a single caste and own the major farm lands of the village. See Bose, Santi Priya, Ibid. pp. 36-40 and 55.

15. See Roy, et. al., op. cit., pp. 67-70.

16. Lionberger, Herbert F., Adoption of New Ideas and Practices, Ames, Iowa: The Iowa State University Press, 1960: 86.

17. The farmers' degree and nature of contact with extension agents and with urban, commercial, and industrial centres were taken into consideration in the construction of the index.

CHAPTER VIII

CHARACTERISTICS OF INNOVATIONS

In the previous section we tried to explain the causes of variation in adoption behaviour in Basudha in terms of the characteristics of farms and farmers. This section deals with the characteristics of the innovations. Here we will discuss how the characteristics of new practices can influence their acceptance or rejection.

Relative advantage

It is a general observation that a new practice will be accepted if it is relatively advantageous. Rogers points out that "It matters little whether or not an innovation has a great degree of advantage over the idea it is replacing. What does matter is whether the individual perceives the relative advantage of the innovation."[1] What he indicates is that when a new practice is introduced its relative advantage is affirmed. Whether it will be accepted or rejected will depend on the individuals' capacity to perceive the relative advantage. There is a great degree of truth in this. But we will take a slightly different stand as an important human factor is involved in the issue. We strongly feel that the relative advantage of an innovation cannot be judged by any standardised technique unless the situational and sociocultural factors of the people to whom the practice will be introduced are taken into consideration. We are

convinced that when a new practice is introduced by a government agency its relative advantages are already proved, at least from the point of view of the introducer. But taking all situational and sociocultural factors into consideration, from the point of view of the potential adopters it may appear different.

Marriott observes that adoption of a new practice is not simply replacement of an old practice. It is the replacement of an old practice in the total context of interconnections.[2] It is the interconnections that we want to emphasise here. We are inclined to believe that unless they are taken into consideration there remains a vacuum between the understandings of the introducer of the programme and the potential adopters. In Basudha, when N.C. 678 variety of paddy was first introduced by the community development block in 1965, the extension officer of the block demonstrated the relative advantages of this new variety of paddy in a result demonstration plot. The average yield of the new variety was definitely better than the local varieties. Moreover it had a quality of resisting drought. It could also respond to heavy doses of fertilisers. The extension officer was right in his judgement to introduce this variety as the farmers were facing problems of drought and lodging of paddy in the fields where potato is cultivated as the second crop. Usually heavy doses of fertilisers are used in the potato fields and after harvest of potato an early

variety of paddy is grown there. This variety of paddy was very suitable for cultivation in such fields. But the extension officer did not take into consideration the consequences that this innovation might have in other spheres of life of the people.

Most of the farmers of Basudha visited the demonstration plot of the new variety of paddy and were convinced about its relative advantages. In the next year this variety was cultivated by about half a dozen farmers of the village. But in 1967, none but the lone farmer whose land was used as the result demonstration plot cultivated this variety of paddy, and that too in only 0.15 acre of land. Now the question arises, when the result demonstration of this new variety of paddy was successful, and it was enthusiastically taken up by several farmers, then why within a period of one year did the variety become unpopular in the village.

Further enquiry in this matter reveals that all of the cultivators who tried this variety got better yields. A close observation, however, shows that when the farmers made rice from this variety of paddy they found that the taste of the rice was not as good as the old local varieties. Then they tried to use them for preparing murhi[3] that the villagers consume in huge quantities. When murhi was prepared from this rice they found that this variety was not suitable for preparing murhi either. The rice grains

were hard and small and did not puff properly. The farmers' next attempt was to dispose of this variety of paddy to the local dealers. The farmers felt very humiliated as the dealers at first refused to buy this variety of paddy. Though the dealers at last agreed to buy, they offered lower than the market price. This affected the farmers very negatively and as a result, those who cultivated this variety of seed, except one, did not try it for the next year.[4]

In order to understand the feelings of the farmers it is necessary to say a few words about the nature of their market relationship. In Indian villages, the relationship between a dealer and his customers mostly operates in an informal way. Usually the customers visit the same dealer whenever necessary and thus they develop a sort of relationship that is quite close to the traditional jajmaani relationship. Both the dealer and his customer are careful in maintaining this relationship. In such a situation any act of refusal from either side is considered as an insult. The farmers of Basudha felt humiliated when the dealer refused to buy this variety of paddy. They felt even worse when they were called greedy by some of their covillagers who thought that they cultivated this new variety of paddy to make more money.

Though there are some resentments in the Indian value system toward accumulation of wealth, economic enterprises are not generally discouraged. But when it is

translated as an act of greed it is highly resented. In this case the cultivation of this new variety of paddy would be considered as an economic enterprise if it were cultivated by farmers who are in the bare subsistence level of agricultural economy. But those who tried this variety in Basudha were mostly from economically well off families. To other villagers it seemed to be an expression of their greed.

The above example shows how a new variety of paddy that was apparently advantageous turned out to be disadvantageous when all the interconnections were taken into account and the innovation was judged from the point of view of the potential adopters. In comparison to the disadvantages, the relative advantages of the new practice did not appear to be so promising.

Some scholars have depicted that the relative advantage of a new practice is emphasised by a crisis. Patnaik[5] describes on the basis of his observation in Orissa how a crisis created by drought and insect attack enhanced acceptance of plant protection chemicals. Rogers, however, cites several studies to show that a crisis can both enhance and retard acceptance of an innovation.[6]

Our experience in Basudha suggests that whatever the influence of crisis may be on the adoption behaviour of the

farmers, it does not have any lasting effect. When an epizootic broke out in Basudha in 1961, all the villagers took interest in getting in touch with the veterinary dispensary and got their cattle inoculated. Since the end of the crisis no one has talked of animal inoculation. Similar is the case of application of plant protection chemicals. When there is any insect attack they hurriedly make arrangement to spray insecticide in the fields. But as soon as the problem is over they do not think of using insecticide any more. We could not find a single case in the village where the farmer used insecticides as a preventive measure though such use was highly recommended by the block, particularly in cases of potato and sugarcane cultivation.

The above facts suggest that the relative advantage of an innovation cannot be judged unless the situational and sociocultural factors of the people to whom the practice will be introduced are taken into consideration. Each practice, either old or new, has its complex set of interconnections and relative advantageousness of an innovation should be judged in the total context of interconnections. The relative advantage of a new practice is sometimes emphasised by a crisis though the crisis may not have a lasting effect.

Compatibility

The compatibility of an innovation is an important factor that influences the adoption behaviour of the farmers. When the community development project came into operation,

improved poultry birds (chickens) were introduced in Basudha through them. The members of the chhotalok castes readily welcomed the innovation but the bhadralok rejected it outright.

As there is a cultural stigma attached to raising chickens by the upper caste Hindu, none of the bhadralok castes of Basudha accepted any improved chicken.[7] All these birds were distributed to the members of chhotalok castes. As it is permissible for them to raise chickens there was no problem for their acceptance. But mere acceptance of a new practice does not always result in adoption.

The idea behind this innovation was to replace and improve the inferior indigenous birds. But after two years of this introduction it was found that the innovation not only failed to replace the old indigenous bird, it itself became eliminated.

A question arises here is why the birds got eliminated when they were so enthusiastically received by a section of the villagers? When the birds were distributed, the extension officer explained to the receivers how to take care of them and how to feed them. To the receivers of these birds the idea of taking care of chickens or feeding them was entirely foreign though they were quite familiar with the idea of raising chickens. This half-familiarity

with the practice affected the innovation adversely. "How can we take care of chickens when we cannot take care of our own children?" Budhan Soren told. "We always raise chickens and our grandfathers also did that. But I don't think we ever had to ask our women to cook food for the chickens," he added.

According to local custom of raising chickens, no one takes any care of them or feeds them. The chicks are let loose and allowed to grow freely. As a result about a half of them die when young. The villagers took these cases of heavy mortality as unavoidable. "If you raise ten chicks, five of them are always going to die no matter how much care you take of them," Shibu Murmu told. "We raise chickens so that it does not involve any labour or much expenditure. Otherwise it would be an impossible task for us," he added. However, the chickens which survive are immuned to local diseases. The improved chickens on the other hand, were more susceptible to diseases. Not only that, they were used to regular feeding. This was not done by the villagers. Therefore before they could get adjusted to the local situation the improved birds died.

An analysis of the above facts reveal several things to us. First, the same innovation may receive different types of acceptance by different segments of population of the same village, depending on their sociocultural background. The improved chickens

were welcomed by the members of the chhotalok castes. The bhadralok rejected them. Second, if an innovation is accepted its associated practices may not be acceptable to the adopters. In the case of chhotalok, though the idea of raising chickens was compatible with their way of life, they were unfamiliar with the idea of modern chicken raising techniques. As a result, in spite of all efforts from the extension officers, the programme failed.

Barnett[8] mentions "tie-in" techniques that brought some success in the introduction of incompatible products. Our experiences in Basudha show that while this technique can make an incompatible innovation acceptable, it can also create complications that may adversely affect adoption of other innovations.

When the community development block selects a plot of land for result demonstration it is the practice that it supplies most of the agricultural inputs and the owner of the land alone gets the return. When it was found that most of the farmers were willing to spare their land for demonstration purposes the block decided to tie-in agricultural implements, that had no demand with this programme. According to this decision, lands were selected for result demonstration only of farmers who agreed to buy some agricultural implements at a government subsidised rate. By adopting this technique the block was able to sell some of the agricultural implements, though they were hardly used by the farmers. A paddy weeder, a seed drill,

and a few other implements were thus pushed on to Gour Mandal of Basudha, who never used any of them. Though at the time of buying he willingly accepted these implements, now he feels that the government has unnecessarily made him waste some money.

The block followed the same technique to introduce mould board plough. As we have already said, the farmers of Basudha refused to buy a plough even at a government subsidised price, as it was not suitable to the local conditions. Though its better workability was acknowledged, the farmers considered it useless as the plough was too heavy for their bullocks, that were mostly of indigenous breed. Further, as it was made of a single piece of iron, the villagers complained that the entire thing would have to be thrown away in case of any complaint, as the village blacksmith did not know how to repair it. As a result, in the judgment of the farmers of Basudha, the local plough was considered superior to the new mould board plough as the local plough can be repaired or replaced, part by part, by the village blacksmith. As some of the extension officers thought that the farmers might get used to this type of plough once they are made to use them, the mould board plough was tied-in with duni,[9] that had a great demand. The farmers reacted to this negatively. They not only refused to buy ploughs, on the contrary, they got suspicious about the objective of the programmes. As Badal Mandal of Basudha puts it, "I cannot understand what the government wants to do to us. Do they want to improve our condition? I doubt it. Why should I buy an iron plough when

I need a duni? If the government genuinely wanted us to prosper they would not have pressed us for wasting our money in buying a plough when they knew that we were not going to use it. I have decided not to deal with the government any more. I already told the gram sevak (village level worker) about it. This is foolish." As a result of this feeling, even the lift irrigation device, that had otherwise a great demand among the farmers, remained unsold in the block.

These above facts indicate that in a segmented society like India the same innovation may receive different types of acceptance by various segments of population depending on their sociocultural background. So before introducing any new programme it is necessary to know the sociocultural background of the people and judge whether the innovation is compatible or not. Partial acceptance of a new practice is sometimes as ineffective as nonacceptance. "Tie-in" techniques, though they may bring about some success in the introduction of incompatible products, can also adversely affect adoption of other innovations.

Complexity

There is a consensus that the degree of complexity of a practice is negatively related to its adoption. As the adoption of a complex innovation needs some skill, the farmers often refuse to accept it. Barnett observes, "Activities that required concentrated and prolonged effort to master them or to gain an understanding of them are at a disadvantage compared with some alternative that does not. The difficulty of

reconditioning oneself or of relearning something sets up an insurmountable obstacle to many proposed changes even though their desirability may be generally agreed upon."[10] Patnaik found in Orissa that all simple schemes that involved few factors were successful whereas seventy five per cent of the multi-factorial schemes failed.[11] Bose and Dasgupta's study in West Bengal shows that simple, direct and inexpensive practices are more readily accepted than otherwise.[12] Rogers also cited several examples where a negative correlation was found between the complexity of innovation and the rate of adoption.[13]

Our observation in Basudha shows that the complexity of the practice as such does not matter much. The farmers, if necessary, make adjustments to the complex practices and make them suitable to their own condition. For example, previously the block recommended fertiliser mixture for potato and wheat fields. When it became difficult to get them in unadulterated form the block recommended that the cultivators buy the constituent elements of the fertiliser mixture separately, and mix them in the appropriate proportions. At the initial stage, most of the farmers had a great difficulty in remembering the formula. It was especially difficult as most of the fertiliser names were foreign to them. But within a short period, most farmers gave the constituent elements some local name by which the elements could be identified and got used to the proportions. Those who could not, were helped by other farmers.

In the case of cultivation of high yielding varieties of paddy and wheat also the villagers made adjustments. If one has to follow all recommended practices associated with the cultivation of these varieties of paddy and wheat it is really a very complex affair about which most of the farmers are unfamiliar. In Basudha, none but a single farmer followed all the recommended practices and that too, only in one particular plot of land. Other farmers who cultivated them used only the high yielding variety of seeds and followed mostly the local methods of cultivation.

Another example that, though the villagers like simple things more than the complicated ones, they are quite able to handle complex matters, involves lift irrigation. The farmers of Basudha depend on lift irrigation for growing their winter crops. There are only five tanks in the village from which irrigation water is available. As there is a large number of farmers who need water at that time there is a great scarcity of water. The farmers are not allowed to lift water at all if the water level goes down to six feet. So in order to make the distribution of water uniform and minimise the cost of irrigation, the farmers developed a complex system. Those who have contiguous plots formed a sort of seasonal irrigation cooperative. Each farmer contributes toward construction of distributories and of the main ditch, locally called gaari, from which water is lifted. The rate of contribution towards the payment of labour varies depending on the amount of land that the individual farmers own for such

irrigation. As no two people can get irrigation water simultaneously every individual farmer has to keep track of everything regarding this irrigation system. However, the societies operated with superb efficiency without ever maintaining any written record. As the farmers themselves have developed this system they are quite familiar with each and every step of this organization. As a result, despite the complexity it operates smoothly.

Though the farmers like simple things more than the complicated ones the above examples suggest that it is not the complexity as such that influence their adoption behaviour. It is the farmers' unfamiliarity with the complexity of the innovation that influence their adoption behaviour.

Cost and divisibility

There are some innovations that involve large expenditures and do not give any chance for trial. An irrigation pump may be cited as an example. In Basudha, though it seems that the farmers would be in a position to buy an irrigation pump had there been a scope for trial, it did not really stand in their way. Almost all of them had opportunity to see its usefulness and efficiency when such sets were used by farmers of a neighbouring village. There is a great demand for irrigation pumps in Basudha. What is more striking is that some samll farmers who do not have enough land and money to invest in a pump by themselves were so fascinated by its usefulness that they formed a small cooperative to buy pumps.

As far as the construction of masonry compost pit is concerned, we found a different picture. In this case also there was no scope for trial and the acceptance of this innovation would involve a reasonable amount of money. But the farmers of Basudha were skeptical as the relative advantage of a masonry compost pit was not as clear and obvious as that of an irrigation pump. The above examples show that the influence of cost and divisibility on the adoption of the innovations vary depending on the relative advantage.

Communicability

The results of some adoptions are easily visible to the farmers while there are others whose results are difficult to observe.[14] In Basudha, the farmers accepted the innovation more readily when the results of adoption were visible than when they were obscure. As for example, when there was a pest attack the farmers used plant protection chemicals as a curative measure. But none of the farmers ever used any plant protection chemical for preventive measure though it was highly recommended by the extension officers, particularly in the cultivation of sugarcane. Though Iyab Seikh of Basudha suffered loss in his sugarcane crop for several years, he did not use plant protection chemicals for preventive measure as he thought that would be an useless expenditure. Villagers' lack of response toward improved cultural practices also confirm that they are skeptical to accept an innovation whose result is not

visible or understandable to them. If they apply fertiliser and the plants grow well they can see this result; but if they follow improved cultural practices they do not know what happens. That is why only about one per cent of the farmers of Basudha followed improved cultural practices and that too in very small plots of lands.

In this chapter we have briefly discussed the various characteristics of innovations and examined their influences on the adoption behaviour of the farmers. We found that the relative advantage of an innovation does not depend on its success in the laboratory experiment. It rather depends on the situational and sociocultural factors of the farmers who are the potential adopters. Though a crisis sometimes increases the perceived relative advantage of an innovation it does not have any lasting effect. From this we conclude that it is necessary to judge the relative advantage of an innovation in the total context of its interconnections with other factors in the situation in which it is advocated.

As far as the compatibility of an innovation is concerned we conclude that in a highly segmented society like India the people of various segments may react to the same programme differently. Whether an innovation will be accepted or not depends on the sociocultural background of the people of various segments. From this we can further conclude that first hand knowledge of the sociocultural background of the people is essential for the success of a programme.

We found that the partial acceptance of a new practice was sometimes as ineffective as nonacceptance. This indicates that once an innovation is introduced, proper care should be taken to make sure that all the recommended practices associated with it are observed.

Regarding the use of "tie-in " techniques, though we sometimes found it quite successful in introducing incompatible products it also adversely affected adoption of other programmes. So, there should not be any indiscriminate application of these techniques.

The farmers, in general, seemed to like simple thing more than the complicated ones. They are also quite capable of handling complex matters if they are familiar with the situation. So in case of complex innovations it is necessary to take proper care to make the farmers fully aware of the complex nature of the programme.

The divisibility and cost of innovations as such did not seem to influence the adoption behaviour of the farmers. If the relative advantage of the programmes are well demonstrated the farmers take interest in them in spite of their high cost and indivisibility. So for the success of a programme its relative advantage should be adequately emphasised.

The degree of communicability of an innovation considerably influences its acceptance or rejection. So

before introducing any programme its degree of communicability should also be taken into account.

FOOTNOTES

1. Rogers, Everett M., Diffusion of Innovations, New York: The Free Press, 1962: 124.

2. Marriott, McKim, "Technological Change in Overdeveloped Rural Areas," Economic Development and Cultural Change, Vol. 1, 1952-53: 261-272.

3. We have already stated that the villagers consume a huge quantity of rice and murhi every day in the morning, at noon, and in the evening.

4. Only a single farmer in Basudha cultivated N.C. 678 variety of paddy in 0.15 acre of land. He told that there was no doubt about its higher yield and drought resisting capacity. It was also true that it fetched lower price in the market and the rice and parched rice of the paddy are not good to eat. The rationale behind his cultivation of this variety was that he did not sell this variety of paddy. He got the rice made and distributed them to his munish (farm servants) as part of their payment. As the munish like coarse rice better than fine rice they accepted them ungrudgingly. Naturally it was profitable for the farmer to cultivate this variety of paddy in a small plot of land.

5. Patnaik, N., "Adoption of Agricultural Practices in a Peasant Community in Orissa," in Selected Readings on Community Development, by T.P.S. Chawdhari (ed.). Hyderabad: National Institute of Community Development,

1967: 99.

6. Rogers, Everett M., op. cit., pp. 125-126.

7. Traditionally, all upper caste Hindus are not supposed to eat chicken. Now a days most of the male members of Basudha eat it but chicken is never cooked in the kitchen of an upper caste Hindu. There are separate sets of utensils for cooking chicken and these are considered ceremonially impure. If a woman touches them, even when they are otherwise clean, she has to have a purificatory bath. However, very recently a member of one of the zamidaar families started raising improved chickens. Though many people are dissatisfied with this development, they do not say anything about it as they do not want to get involved in a clash with the zamidaar.

8. Barnett, H.G., Innovation: The Basis of Cultural Change, New York: McGraw - Hill Book Company, Inc., 1953: 362-363.

9. It is a keel shaped implement made of iron. It is, rather, a modification of the traditional lift irrigation device that was made of wood. Its construction is very simple. It can be repaired by the local blacksmith and the villagers find it very convenient to use it.

10. Barnett, H.G., op. cit., p. 369.

11. Patnaik, N., op. cit., p. 97.

12. Bose, Santi Priya and Satadal Dasgupta, The Adoption Process, Calcutta: Dept. of Agriculture, Govt. of West Bengal, 1962: 11.

13. Rogers, Everett M., op. cit., pp. 130-131.

14. Rogers calls it communicability of innovation. For definition see Rogers, Everett M., op. cit., p. 132.

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CHAPTER IX

COMMUNICATION AND ADOPTION

In the previous chapter we discussed in some detail to what extent the characteristics of farmers or of innovations influence the acceptance or rejection of a new practice. In this section we will discuss the role of one extension agent, the village level worker (VLW), and will try to demonstrate how the acceptance of this role by the villagers can influence their adoption behaviour. We will also discuss how an innovation once accepted by an individual gets diffused in the village.

Role of village level worker

When a new idea or practice is introduced to a people, the individuals concerned are confronted with a question as to whether or not to try it. Though out of venturesomeness some people can at once accept and try it, the general tendency of the people is to study the innovation carefully and judge whether the acceptance of the new practice would be advantageous or not. On the basis of his observations in two Uttar Pradesh villages, Dube[1] notes: "The acceptance of the programme itself, or of its constitutent parts, is determined to a considerable extent by a variety of complex cultural factors, ranging from simple habits and accepted social practices to the intricate

patterns of belief, social structure, world-view, and values and attitudes."

In our discussion, we have already covered some of the points mentioned by Dube. Danda[2] has also discussed somewhat extensively how these various factors influenced the adoption of different innovations.[3] The actual process of adoption begins when an individual becomes aware of an innovation either by personal sources such as friends and neighbours or through extension agents or the mass media. When the different programmes of India's community development project were first introduced to the people, all the channels of information were utilised. But the villagers of Basudha primarily depended on the VLW as the major source of information on agriculture. Consequently, the success or failure of agricultural programmes largely depended on the degree of success with which the VLW has been able to play his role.

Danda,[4] on the basis of his study of a Western Uttar Pradesh village has shown how the relationship of the extension agent with the villagers, village leaders, and superior officials could influence the success or failure of various development programmes. It was found that a smooth relationship, good understanding, and mutual trust between the villagers and the VLW were extremely important for the success of any programmes. Dube has observed that the effectiveness and the acceptance of change programmes

are largely controlled by the cultural predispositions of the community toward the sponsors of change or their agents. He says, "The initial response to and the ultimate acceptance of the extension agents are both governed by this factor. The degree of effectiveness with which these extension agents can operate as opinion leaders or as agents preparing the ground for change is determined largely by the predisposition of the community in which they operate."[5] A good innovation may be rejected because the community holds its local promoter suspect and questions his bonafides.[6] In our study of Basudha we will try to demonstrate how the role of the VLW fits into the community structure and consequently influences the adoption behaviour of the villagers. The main focus of our discussion will be how the role of the VLW was perceived by the villagers of Basudha.

In our day to day observation we found that the relationship between the VLW and the majority of the villagers of Basudha was essentially one of distrust. Whenever he came with a new programme, the first reaction of the farmers was to oppose it. Most of the villagers were very indifferent toward him and did not like to listen to what he had to say. On various occasions we found the villagers rather unreasonably noncooperative with him.

For example, on July 20, 1967 the VLW came to Basudha with a sample of IR-8 seeds. He explained the relative advantages of the variety of seeds and asked Umesh Ghosh

whether he would like to try it and have some seeds. Umesh Ghosh got very furious at this and told the VLW somewhat rudely, "I understand that you have some training in agriculture. But do you think that you know better than what the farmers of this village know about agriculture? I am a born farmer and I know what would be good for me. Why do you want to poke your nose into our affairs? Do I have to believe that you are here to look after our interests?"

Though most of the villagers were not as blunt in their behaviour with the VLW as Umesh Ghosh was, most of them shared the distrust of Umesh Ghosh.

The VLW was quite sincere in his duties and always tried to help the villagers. He knew his work and when verbal instructions were not enough he personally demonstrated the techniques of improved agricultural practices. We sometimes found him working with the munish (farm servants) engaged by the farmers of Basudha. In spite of all his efforts very few villagers had any respect for him. On the contrary, we sometimes found the villagers humiliating him unreasonably when he offered to help them in their agricultural matters.

When the VLW came to know that Shibapada Mandal got some seedlings of Taichung native 1 variety of paddy he requested Shibapada Mandal to let him know when he would like to transplant the seedlings. He wanted to help the farm servants to get the seedlings transplanted in rows.

In answer to this, Shibapada Mandal was very harsh in his remarks. He said, "Did I seek your help? When we need any help we consult our murubbi (respected old men of the village). I don't want any help from the government. I don't trust the government." Similar distrust toward government officials has been observed by various authors in different parts of India.[7]

On the surface, we did not find any reason for this kind of behaviour on the part of the farmers of Basudha. A close examination of the situation, however, revealed that there were some reasons behind this type of behaviour.

There was another 'outsider' in the village, a health assistant.[8] His duty was to vaccinate against smallpox. He lived in Basudha for one year and we found that the villagers were not only cordial and cooperative with him, they were also anxious about his welfare.

At first it appeared a bit paradoxical to us. Here were two representatives of the same government: the VLW and the health assistant. Both of them belong to the same rank and their nature of duty was also similar (both of them were extension workers). But when one of them received affectionate treatment the other one was disrespected.

By way of discussion we were once told by a villager, "We don't trust the government officers. They don't come here for our welfare. But we trust Kamal Babu (that was the

name of the health assistant) as he is our son."

Later on we came to know that the health assistant had to face more or less similar non-cooperative and uncordial treatment by the villagers when he first came to the village. It was a sudden incident that promoted him from his role of the outsider to one of insider.

At the time of the incident the health assistant was working on a small pox eradication scheme and was assigned with the duty of vaccinating all the individuals of the village. Once on his usual round, he went to Mrs. Gouri Mandal of Basudha and requested her to get vaccinated. She refused and was also unwilling to have her children vaccinated. The health assistant felt very awful about it and being a little desperate he told the lady, "You are like my mother. I cannot let you die of small pox. I must vaccinate you." This changed the attitude of Mrs. Gouri Mandal dramatically and she told the health assistant, "When you call me your mother I cannot refuse you." She got vaccinated and, later, consulting her guru (religious preceptor), made the health assistant her dharma son (a ceremonial relationship that can be established across caste level). Later on we were told by Mrs. Gouri Mandal, "He called me his mother and sat there like my son. How could I refuse him?"

When the health assistant was accepted by one of the villagers as her son he did not remain outsider to the

villagers any more. On one occasion we were told by a Bagdi villager, "He is like us. He knows everyone of us by name. When we meet in the street he enquires how my parents or kids are. He also comes here at the time of Dharmapuja every year."

The above example shows how the health assistant, although an outsider, fortuitously got accepted by the villagers as a member of their own community. This also reveals that personal relationship with the villagers can be more effective in winning confidence of the villagers than any formal relationship.

In our discussion of economic life of the village we have seen how an individual member is connected with a number of other members through economic relationships. In all the cases, however, although the relationships were obligatory and based on trust, they were somewhat informal. It is because of this background of the villagers that an informal approach appeals to them more than a formal approach.

Now the question remains to be answered is, why the village level worker failed to be recognised as a member of that village when the health assistant could get their recognition so successfully. There were several factors involved. Elsewhere we have discussed, some of the factors in general terms.[9] Here, we will examine only those factors that are somehow associated with the role of the village

level worker.

In our discussion of social life of the village we have mentioned about the "we" and "they" feelings of the villagers. These considerably influence their world view and pattern of behaviour. Those who belong to the "we" group are generally trusted and the membership of this group is structurally circumscribed. As stated earlier, among the members of the same family or bhayaad the relationship is based on unalloyed trust, and mutual interdependence. The degree of trust gets a little diluted when we consider the gnati or caste members. Among the chhotalok, however, the caste members are as trusted as the bhayaad members by the bhadralok. The reason behind this is that the caste panchayat is a more functional unit among the chhotalok than it is among the bhadralok. The covillagers also trust one another, but the degree of trust varies, depending on whether the villagers belong to the same segment of caste hierarchy. For example, the members of the bhadralok castes rely on one another more than on the members of the chhotalok castes, unless their relationship is strengthened by some other tie. These relationships had consequence for the lack of acceptance of the VLW.

A close observation of the life of the villagers reveals that the degree of interaction and social ettiquette also varies according to these lines of intra-village relationship. For example, among the bhayaad

members, a verbal invitation is enough for occasions like marriage. To invite a covillager or a person who is an affinal kin, an invitation letter, as well as a verbal invitation are required. This means that the relationship between affinal kin is more formal than the relationship between bhayaad members, who are agnates. Similar differences have been observed in the exchange of gifts also. If there is any marriage among the bhayaad members, it is not necessary to present any gift. In the case of others it is almost compulsory to present a gift. The receiver usually keeps track of the gifts and on similar occasions presents an identical gift. Loans without any interest can be exchanged between members of the same bhayaad. With the people who are considered outsiders, though this is not prohibited, it is rarely practised. This clearly shows that the closer is the degree of kinship, the more informal is the relationship and the more is the trust.

Except for the covillagers everyone belongs to the "they" group of the villagers. They are outsiders and cannot be trusted. One exception is made in the case of affinal relatives and hereditary servants. They are included in the "we" group though they may be from outside the village and are generally trusted.

The above facts show that whether or not a person can be trusted depends on the degree and nature of relationship. Ordinarily all formal relationships in the village are based

on distrust. And, as the example of the health assistant shows, if a formal relationship can be replaced by an informal relationship, a distrusted person can come within the fold of the trusted group.

Usually no person is identified as a member of the "we" group unless he lives in the village, or was born there, or has his parental home there. The VLW of Basudha was assigned to work in three villages. It was not possible for him to stay in all villages at the same time. We have already mentioned that the VLW lived in a neighbouring village. As a result, he was an outsider to Basudha and automatically belonged to the less trusted group.[10] By repeated visits and personal contacts he could probably have bridged the gap between him and the villagers. But in his case administrative inefficiency widened it enormously. It so happened that in Basudha the VLW by his personal contacts, tried to convince several of the villagers to try a new variety of paddy. Only Gour Mandal accepted and planted it immediately. The others promised to try it the next year. The seeds were given as being of a late variety locally called aman and were planted in a lowlying plot of land. But unfortunately they appeared to be of an early variety i.e. aus. Aus paddy is never cultivated in low lands as the field remains under water when the crop becomes ready for harvest. Because of this error the farmer concerned had enormous difficulty in harvesting the crop from the water and carrying it home. As the representative of the

community development block, the VLW distributed the seeds to the villagers. So they blamed him for this fault.

The Indian farmers value dependability more than efficiency. Naturally a bad precedent strikes the villagers more than several good precedents. During our stay in the village we were reminded of this incident by several farmers of Basudha. They became very skeptical about the whole community development programme. This unfortunate incident retarded the other programmes considerably.

The villagers seldom do anything that is strange to them or go to a place that they do not know. If they do go to a strange place, they accompany someone who knows that place. For example, very few of the villagers of Basudha have visited the city of Calcutta. Those who have, invariably went with someone who was there before. Similarly, the villagers sometimes go to Burdwan city to consult a physician but they do not go to him directly or indiscriminately. They will accompany someone who knows a physician and go to that physician. They feel insecure if they cannot find someone on whom they can personally depend. In their business transactions also they establish a relationship with a person with whom they can find emotional security. They are afraid that they may be cheated.

The above phenomena suggest that whether or not a new practice will be accepted is largely dependent on the acceptance of the extension agent by the villagers. As long

as the VLW is perceived as an outsider, the villagers will always remain skeptical about the programmes.[11] For the success of a programme, he must be accepted within the realm of trusted persons of the villagers.

What is essential is that the villagers should understand the intent of government planners, and extension workers should be intimately acquainted with the culture that they hope to change.[12] This will make extension workers aware of the expectations of the villagers and will considerably contribute to bridging the gap between themselves and the villagers.

The above facts suggest that the gap that exists between the extension agent and the villagers can be bridged in two different ways: first, the extension agent will have to develop personal relationships with the villagers in such a way that he should be accepted, at least, as a member of the village.[13] Second, there should be some special endeavour to widen the realm of trust of the villagers. Social education might be a useful tool to achieve this.

From our experience in Basudha it was found that the adopters' realm of trust was much wider than that of the non-adopter. Adopters were more free to move with outsiders and their extra-village contact was also more.

Role of gossip-groups

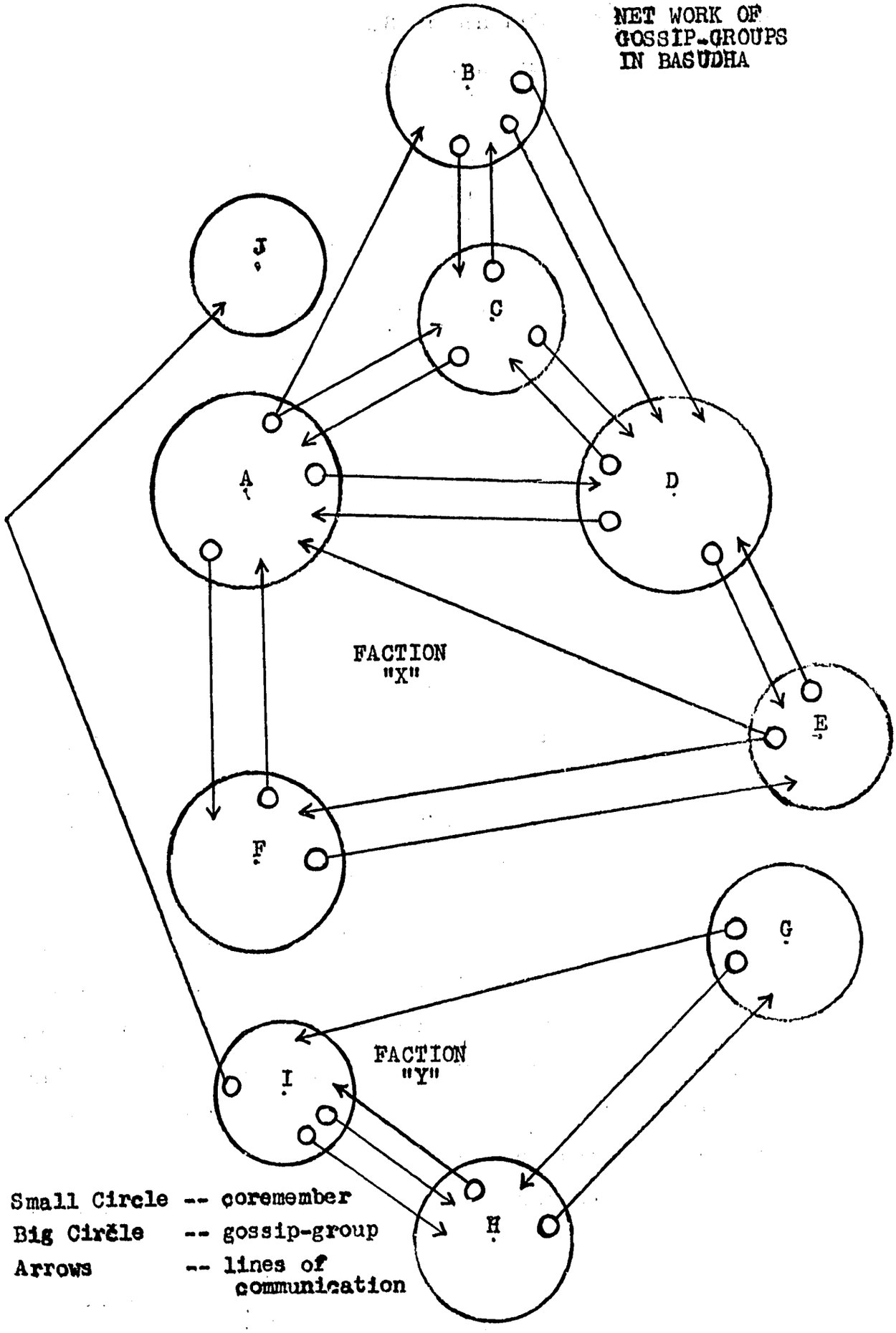
In our discussion so far we have emphasized the importance of the role of the VLW for introducing a new

practice. Our experience in Basudha shows that after the successful introduction of a new practice the role to be played by the VLW becomes very small.[14] If the practice is compatible with the farmers situation, it more or less automatically trickles down to others and there is a regular pattern of flow of information in the village.[15]

In our discussion of the community structure of Basudha we have described, somewhat extensively the different structural units of the village. Here we would like to examine the mechanism of how information, once reaching the village, can pass on through various structural levels until it has reached most of the villagers.

We have already mentioned that there are a number of gossip-groups in the village and that people discuss different local and regional matters there. Though this is an informal organisation and there is no regular membership, usually the same group of people, having identical interests, sit together every evening. As a result, different topics get prominence in various gossip-groups.

It was observed in Basudha that a member of a gossip-group usually discusses his farming plans there if he wants to adopt a new practice or make any change. Though it is not obligatory, a farmer seems to feel more secure if his plans are approved by other members of the gossip-group. This indicates that the gossip-group plays a vital role in a farmer's decision making process. The gossip-groups also


NET WORK OF
GOSSIP-GROUPS
IN BASUDHA
B
J
C
A
D
FACTION
"X"
E
F
G
I
FACTION
"Y"
H
Small Circle -- coremember
Big Circle -- gossip-group
Arrows -- lines of
communication

play an important part in the flow of information in the village.

In order to have a clear understanding of the role of the gossip-groups in Basudha it is necessary to say a few words about the nature of their organization. The diagram represents the net work of gossip-groups in Basudha.

There are ten gossip-groups in the village. Following the two factions of the village, these ten are organised into two larger groups. Six gossip-groups are attended by members of faction X and four are attended by members of faction Y. Seven of the ten gossip-groups are attended by the bhadralok, two by the Muslims, and the remaining one by the Bagdis and some members of the Dome caste. There is no gossip-group for other chhotalok who usually spend their evenings in the matalshala (village distillery) drinking and discussing various things.

Each gossip-group has a number of core members who regularly attend the gossip-group. A core member of a particular gossip-group can visit another gossip-group if he need some special information that the latter gossip-group mostly discuss. But there is hardly any exchange of information between the members of gossip-groups belonging to opposite factions of the village. Though this puts a barrier in the flow of information between the factions it could not totally check the flow. There are some people who do not visit any of the gossip-groups very regularly. Whenever

they come across any discussion that interests them, they sit there. They play a more or less neutral role in the factionalism of the village. They are the carriers of information across the faction line.

In 1961, the community development block decided to introduce a new variety of improved paddy seeds. In order to popularise this new variety the block planned to have a competition among the farmers. Nemai Haldar (of Basudha), a core member of gossip-group D (see the diagram), who had a close contact with the village level worker, at first came to know about the competition. He discussed the matter with the members of his gossip-group and along with some of them decided to compete.

Abhoy Haldar, who is also a core member of gossip-group D, spread the news among the members of gossip-group A when he attended that gossip-group for consultation with Umesh Ghosh and Kalipada Nayek regarding a law suit. (It may be noted here that for any such consultation the villagers would mostly consult the members of any gossip-group who had the special knowledge that they needed.). When they came to know about the competition some members of the gossip-group A also decided to take part in it.

Panchkari Pal, a core member of gossip-group E came to know about the competition when he attended the gossip-group D for discussing an agricultural problem. (It may be noted here that gossip-group D primarily discussed agricultural

problems). He spread the news of competition among the members of his own gossip-group, i.e., group E. Thus most of the members of faction X came to know about it and several of them decided to participate. They jointly got the requisite entry forms and got themselves prepared for the competition.

Enayatulla, a paddy trader and a neutral member of the village (not aligned with either faction), also came to know about the competition from Panchkari Pal of gossip-group E, with whom he had a trade relationship. Enayatulla, in turn, told Gopal Nayek, of faction Y, gossip-group G, with whom he had also a trade relationship, about the competition.

The village factionalism was at its top form at that time. So Gopal Nayek thought that it would be humiliating for his faction if no one of faction Y participates in the competition. So as soon as he came to know about the competition he spread the news among his faction members and, along with some of them, got prepared for the competition. As this became a prestige issue it aroused a great amount of enthusiasm among the villagers and finally Nemai Haldar of faction X, gossip-group D, got an award.

The above example describes the mechanism of the flow of information via gossip-groups in Basudha. It also indicates that village factionalism, though believed to have a negative

influence on adoption behaviour of the farmers, can also promote adoption of an improved practice.

As stated earlier, most of the important decisions of the villagers are discussed in the gossip-groups. Naturally, if someone decides to try a new practice it becomes known to all members of that particular gossip-group. Then, following the structural network of gossip-groups, the information flows from one group to another and finally across the faction line.

An adoption decision by a cultivator which is discussed in his gossip-group is usually approved by other members of the group.[16] As a result of the discussion, their interest is generated about that particular innovation. They often enquire about the prospects of that innovation and if it harvests a good return to the innovator it is gradually accepted by other members of the group and finally accepted by most farmers of the village.[17]

We conclude our discussion of communication and adoption with consideration of how far the programmes of the community development project have been able to cover the entire population of the village.

In chapter V we discussed the various programmes undertaken by the community development administration for rural upliftment. A careful examination of the programmes revealed that there are very few items that can interest

each and every person of the village. As Mandelbaum observes: "The gains of land reform acts and of increased agricultural efficiency tend to go to those who have some land. The landless labourers, and there are many millions of them, get little good from these improvements at the present time."[18]

Similar observations have been made by Mayer[19] and Opler[20] in other parts of India.

The question we are facing is, can a programme meant for a part of the cross-section of the population generate interest of all the individuals of the village? The answer is obviously, no. None of the ten practices that we discussed in chapter VI were applicable to the entire population of Basudha. As most of the chhotalok are landless, they derive practically no benefit from the agricultural programmes. Furthermore, no attempt has been made to increase wages for farm work with the advancement of the agricultural programme. As a result, we find a growing dissatisfaction among the agricultural labourers which to some extent has contributed to the persistence of factionalism in the village.

A landless agricultural labourer of Bauri caste remarked, "We hear that we have become independent. Formerly the government officers would come and stay with the zamidaar. So all benefits were given to the zamidaar. Now

also when the officers from the block come they also move with the zamidaar and whatever benefits are there go to them. Then who should look after our benefit? Now, as before, I cannot feed my children and clothe them properly. Then what good was the independence to us?"

We believe that these feelings are shared by the majority of the landless labourers all over the country. While talking about landless labourers Mandelbaum mentions, "Those groups in a village who suffer the greatest disabilities are not necessarily the ones most restless for drastic change. They may be so greatly concerned with the sheer problem of keeping alive, so fearful of upsetting their slim margin of subsistence, so little aware of other social possibilities, that they are content to keep going much as they are."[21]

Our observations in Basudha differ from that of Mandelbaum. We did not find the landless mass very content with their lot. It is true that the worst sufferers were not the most restless. But they are also aware that some change is going on. A large section of the landless class are anxiously waiting for a drastic change to come and this can be attributed to the effect of the panchayati raj system.

The reaction of the villagers to the implementation of panchayati raj system is varied. We were told by a zamidaar, "Panchayati raj was of no good to us. It simply

bred factionalism. Formerly we were one and there was no litigation in the village. Now we are divided and most of the village money is drained out by way of litigation." Most of the villagers agree with the last part of the comment of the zamidaar. But a substantial number of them firmly believe that of all the changes that have been introduced since independence, only the panchayati raj system, as part of the community development programme, has affected the impoverished, landless majority of the villagers.

We were told by a Bagdi leader of the village, "It is good that we have panchayati raj system. It has brought factionalism no doubt. But it has allowed us freedom to talk and express our grievances." The above remark suggests that though most of the programmes of the community development projects failed to bring about a drastic change in the economic life of the villagers, they have been able to make the villagers aware of the necessity of change.

FOOTNOTES

1. Dube, S.C., India's Changing Villages, Ithaca, N.Y.: Cornell University Press, 1958: 132.
2. See Danda, Ajit Kumar, "Planned Development and Leadership in an Indian Village", unpublished Ph.D. thesis, Department of Anthropology, Cornell University, 1966.
3. Some of these factors have been considered as antecedents to adoption by Rogers. He observes that the paradigm of the adoption of an innovation has three major divisions, the antecedents, the process, and the results. Factors which are present in the situation prior to the introduction of an innovation are called antecedents. See Rogers, Everett M., Diffusion of Innovations, New York: The Free Press, 1962: 305.
4. Danda, Ajit Kumar, op. cit., pp. 287-292.
5. Dube, S.C., op. cit., p. 129.
6. See Dube, S.C., Strategies of Influencing Change, Extension Lecture - 3, delivered at Osmania University, Hyderabad, March 8, 1967: 12 (Mimio).
7. Dube, S.C., op. cit., 1958: 158
8. It may be noted here that we also studied health and family planning practices. They will be discussed under separate auspices.
9. See Danda, Ajit Kumar and Dipali Ghosh Danda, "Factors of Tradition and Change in India" Journal of the Indian Anthropological Association. (In Press)

10. Compare Dube, S.C., op. cit., 1958: 158

11. Similar observations were made by Marriott in a Western Uttar Pradesh Village of India in connection with acceptance of western medicine. See Marriott, McKim, "Western Medicine in a Village of Northern India," in Health, Culture and Community, by Benjamin D. Paul (ed.), New York: Russell Sage Foundation, 1955: 239-268.

12. For a trenchant and provocative discussion, see Luschinsky, Mildred, "Problems of Culture Change in the Indian Village," Human Organization, Vol. 22, 1963: 66-74.

13. There is a general misunderstanding among the government officials as well as villagers about the role of a village level worker. As it was outlined by the community development administration, a village level worker is expected to function as a friend and well wisher of the villagers. To a certain extent he is expected to play the role of a leader of the village people as well. See Dube, S.C., op. cit., 1958: 157.

14. Similar observations were made by Dasgupta. See Dasgupta, Satadal, "Patterns of Agricultural Leadership and Innovation in Six Indian Villages," Indian Journal of Extension Education, Vol. 1, No. 4, 1966: 237.

15. A "two step" pattern of dissemination of information was hypothesised by Lazarsfeld. The first step of information flow is from the formal extension sources to those who are called opinion leaders by Rogers. The second

step involves dissemination of information and influence from the opinion leaders to the average farmers. See Lazarsfeld, Paul F., et. al., The People's Choice, New York: Columbia University Press, 1960: 151. Also see Rogers, Everett M., op. cit., pp. 208-209.

16. Herskovits observed that gossip provides an informal and indirect sanction to an act where a risk is involved. Compare Herskovits, M., Life in a Haitian Valley, New York: Alfred A. Knopf, 1937.

17. Paine also observes that gossip plays an important role in the information-management of a community. See Paine, Robert, "What is Gossip About? An Alternative Hypothesis," Man, Vol. 2., No. 2, 1967: 278-285.

18. Mandelbaum, David G., "Planning and Social Change in India," Human Organization, Vol. 12, No. 3, 1953: 11.

19. Mayer, Adrian C., Land and Society in Malabar, Bombay: Oxford University Press, 1952: 92.

20. Opler, Morris E., "The Problem of Selective Culture Change," in The Progress of Underdeveloped Areas, by Bert F. Hoselitz, (ed.), Chicago: The University of Chicago Press, 1959: 132.

21. Mandelbaum, David G., op. cit., p. 11.

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SUMMARY AND CONCLUSIONS

In this report we have described the process of planned change in a village of West Bengal, India which we have called Basudha. The report consists of four parts. Part I deals with the physical setting of the village. Here we have described the background of the village in general terms and with specific reference to its climatic condition, transportation and communication facilities, institutions, and economic resources.

Part II describes the community structure of Basudha. We have discussed the community structure somewhat extensively. As Wilkening observes "...we must study change not only as a matter of individual choice and action but also as a function of social systems of various types and levels. The studies of farm practice adoption point more and more to the importance of group norms, pressures and processes as the important determinants in the acceptance of innovations."[1]

In Basudha the community structure was found to be one of the most important factors in shaping the individual and making him the kind of cultivator he is. There are three chapters under community structure, viz. Social Life, Economic Life, and Political Life. The discussion of social life incorporates the study of structural components of the village. Though the discussion primarily emphasises the intricately segmented character of the

community, it also points out certain cementing factors that makes an equilibrium between opposed tendencies toward fission and fusion. Most of these cementing factors are of an economic nature. There are, however, certain non-economic factors that also integrate the society as a complex whole. Most of these noneconomic factors are from the realm of cultural life and demonstrate the solidarity of the community. The solidarity of the village becomes more evident when the prestige of the village is involved in some issue with forces from outside of the village.

There are evidences of strong "we" feeling among the villagers. To them the outsiders in general belong to the "they" group and are usually distrusted.[2] These "we" and "they" feelings of the villagers are very important and can be vital to the success of agricultural development programmes.

As far as the discussion of economic life is concerned it has been found that there is a well structured organisation that regulates economic activities of the villagers. It was found that traditional patterns still largely dominate the economic life of the villagers and the economic relationships in Basudha mostly operate in an informal way. The discussion on political life shows how the newly introduced election system of village officials has contributed to the growth of factionalism in Basudha.

Part III includes chapter V and VI and describes development and change in Basudha. Chapter V describes the genesis of programmes for development and incorporates a discussion on various programmes that have been introduced in the village. Basudha's participation in various community development programmes at first glance seemed quite extensive but a close observation showed that the impact of the programmes on village life was rather superficial. It was found that many of the recommended practices accepted by the farmers were not put to use in an optimum manner and thus failed to have the desired effect. It has also been observed that agricultural, health, and transportation and communication programmes were comparatively more successful than programmes of education, social welfare and industrial training.

Chapter VI describes the response of the villagers to various development programmes. The villagers' response to ten selected agricultural practices were taken into account. Here the emphasis of our discussion was to single out the reasons for nonacceptance of recommended farm practices, although we also pointed out the degree of efficiency of the administrative organisation in introducing innovations.

We found that a series of factors were responsible for the nonacceptance or partial acceptance of the recommended farm practices. They include physical factors,

situational factors, economic factors, cultural factors, and the farmers' lack of proper knowledge about the recommended practices. The physical and situational factors include scarcity of local labourers, unsuitability of soil, lack of proper irrigation facilities, and the failure of the extension agency to demonstrate the results of improved practices. We found that these factors have mostly affected the acceptance of use of the following practices: chemical fertilisers, plant protection chemicals, farm equipment, high yielding varieties of paddy and wheat, green manuring, compost pit, and improved cultural practices. Economic factors have largely affected the acceptance of chemical fertilisers, farm equipment, and compost pit.

Cultural factors include simple habits and accepted social norms, beliefs, social structure, world view, and values and attitudes of the farmers. They have mostly affected the acceptance of plant protection chemicals, recommended improved seeds, high yielding varieties of paddy and wheat, green manuring, improved poultry, and recommended dosage. Lack of proper knowledge of the farmers has affected the acceptance of chemical fertilisers, plant protection chemicals, high yielding varieties of paddy and wheat, and compost pit.

Part IV includes chapters VII, VIII and IX. Chapter VII describes the characteristics of adopters and non-adopters of improved agricultural practices and attempts

to establish relationships between characteristics of farmers and their adoption behaviour. Some of the characteristics of adopters depend on physical and situational factors. In this report we included factors such as size of land holding of the farmers, quality of land owned by them, type of ownership of land, degree of fragmentation of land holding, and availability of labourers. Under personal characteristics we took into account age, literacy, family structure, family size, socioeconomic status, and the degree of extra-village contact of the farmers.

Throughout the discussion of Chapter VII we have endeavoured to find out the relationship of the characteristics of farmers with their adoption or nonadoption of recommended agricultural practices. As far as physical and situational factors are concerned we found that the size of land holdings, quality of land owned, land ownership and availability of labour have a positive relationship with the adoption behaviour of the farmers.

Owner-cultivators having large land holdings are more likely to adopt recommended practices than small cultivators or sharecroppers, provided there is availability of labour and suitable lands.

So far as personal characteristics are concerned, we did not find any relationship between adoption behaviour and the farmers' age, family structure or family size. Socioeconomic status, literacy and extra-village contact

of the farmers were positively related to adoption behaviour. There was however, no one-to-one relationship between the level of literacy and the degree of adoption. The degree of adoption appeared to increase with the degree of literacy up to the secondary standard and then onwards the rate of adoption dropped off. This suggests that the farmers with high socioeconomic status and high extra-village contact are more prone to accept recommended practices than the farmers of low socioeconomic status and low extra-village contact, provided they are literate up to the secondary standard. If they are illiterate or have a higher education than the secondary standard they are less likely to accept new practices. This lower adoption rate for the more educated cultivators seemed to reflect the negative influence of off-farm jobs, to which the more educated cultivators gravitated.

Chapter VIII describes the characteristics of innovations. Here we have briefly discussed the various characteristics of innovations and examined their influences on the adoption behaviour of the farmers. We also tried to evaluate the relative merits of various recommended practices. We found that the relative advantage of an innovation was an important characteristic and concluded that its success could not be determined solely in laboratory experiments. Rather, relative advantage depends on the situational and sociocultural factors of the farmers who are the potential adopters. It was also found that though a crisis sometimes

demonstrates the relative advantage of an innovation, adoption behaviour born of a crisis situation may not have any lasting effect. It is necessary to judge the relative advantage of an innovation in the total context of its interconnections with other factors in the situation in which the innovation is considered.

As far as compatibility of an innovation is concerned we found that the people of various segments of the village were apt to react to the same programme quite differently. Whether an innovation will be accepted depends on the differing sociocultural background of the people of various segments. Our study village, like much of India, is highly segmented. From this we can conclude that the first hand knowledge of sociocultural background of the people is essential for the success of a programme.

We found that "tie-in" techniques were sometimes quite successful in introducing practices which were incompatible to cultivators. However, we also found that tie-in techniques, whereby a practice which is not generally favoured by cultivators is made a condition of a highly favoured and desired practice, can adversely affect other development programmes. So, there should not be any indiscriminate application of these techniques.

The farmers, in general, seemed to like simple things more than the complicated ones. But they are also quite

capable of handling complex matters if they are familiar with the situation. So in the case of complex innovations it is necessary to take proper care and to take sufficient time to make the farmers fully aware of the nature of complex programmes.

The divisibility for trial and the cost of innovations as such do not appear to influence the adoption behaviour of the farmers of Basudha. If the relative advantage of the programmes is well demonstrated the farmers take interest in them in spite of their high cost and indivisibility. So, for the success of a programme its relative advantage should be adequately emphasised.

The degree of communicability of an innovation considerably influences its acceptance or rejection. Before introducing any programme its degree of communicability should also be taken into account.

It was observed that the partial acceptance of a new practice was sometimes as ineffective as nonacceptance. This indicates that once a new practice is introduced, proper care should be taken to make sure that all the recommended practices associated with it are properly observed.

Chapter IX describes some aspects of communication and adoption. It was found that diffusion involves two types of people: the advocates of change (extension agent) and the potential users (the farmers). Whether a new

practice will be accepted largely depends on the acceptance of the extension agent (village level worker) by the villagers. As long as the village level worker is perceived as an outsider by the villagers he is distrusted and the villagers remain skeptical about the programmes. This is because the farmers tend to regard an information coming from an outsider as untrustworthy. For the success of a programme the village level worker's acceptance within the realm of trusted persons is essential.

Our discussion of the gossip-groups of Basudha indicates that the acceptance of a programme becomes easy when innovations come from a reference group to which the villagers are positively oriented. This suggests that an informal humanitarian approach appeals to the villagers more than a formal instrumental approach.

To sum up, in this report we tried to isolate important characteristics of farmers and of innovations and to determine the relationships of these characteristics with adoption behaviour. We also tried to find out the reasons for nonacceptance of recommended farm practices. Although various physical, situational, and cultural factors were found to be related to the adoption behaviour of the farmers, our close observation indicates that the relationship between the extension officer and the farmers is the strongest single factor influencing adoption in our study village. As the analysis of the community structure

of Basudha indicates that all outsiders are usually distrusted by the villagers, programmes for development are likely to suffer as long as the extension officer is perceived by them as an outsider. For the success of a programme his acceptance within the realm of trusted persons seems essential.

FOOTNOTES

1. See Wilkening, E.A., "Some Perspectives on Change in Rural Societies," Rural Sociology, 29, No. 1, 1964: 17.
2. Similar observations were made by Hoggart in reference to the British working class population. He writes that, to the British working class population "...the world outside is strange and often unhelpful.... One may call this, making use of a word commonly used by the working class, the world of 'Them'.... The world of 'Them' is the world of the bosses, whether those bosses are private individuals or... public officials.... 'Them' includes the policemen and those civil servants... whom the working classes meet..... 'They' are 'the people at the top'... who... 'aren't' really to be trusted'...." See Hoggart, Richard, The Uses of Literacy, London: Chatto and Windus, 1957: 62. Gans, also, on the basis of his observation of the way of life of a low-income population of Boston neighbourhood, concludes that to these people "the outside world is not to be trusted". This extends to skepticism. See Gans, Herbert J., The Urban Villagers, New York: The Free Press, 1962: 236.

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A P P E N D I X A

AGRICULTURAL CALENDAR

Serial Number	Local Name of Months	Month in the English Calendar	Name of Crop	Agricultural Operations
1	Baisakh	April-May	aman paddy	manuring in seedbed
			aus paddy	manuring in seedbed
			sugarcane	irrigation and weeding
			jute	sowing
			hemp	ploughing and levelling
			ginger	harvesting
			vegeta-bles	irrigation and harvesting
2	Jaistha	May-June	aman paddy	sowing in seedbed and ploughing the field
			aus paddy	sowing in seedbed
			sugar-cane	irrigation and manuring
			jute	weeding
			hemp	sowing
			ginger	sowing
			vege-tables	harvesting

Serial Number	Local Name of Months	Months in the English Calendar	Name of Crop	Agricultural Operations
3	Asad	June-July	aman paddy	irrigation and ploughing the field and transplantation in the field
			aus paddy	ploughing the field
			sugarcane	manuring the field and tying of sugarcane plants
			hemp	sowing
			vegetables	harvesting
4	Shraban	July-August	aman paddy	irrigation and ploughing the field and transplantation in the field
			aus paddy	transplantation in the field
			sugarcane	manuring the field and tying of sugarcane plants
			vegetables	preparation of seedbed and harvesting
5	Bhadra	August-September	aman paddy	weeding and manuring field
			aus paddy	weeding
			sugarcane	manuring the field and tying of sugarcane plants
			hemp	harvesting
			vegetables	transplantation and harvesting

Serial Number	Local Name of Months	Month in the English Calendar	Name of Crop	Agricultural Operations
6	Aswin	September-October	aman paddy	weeding and manuring of field
			jute	harvesting
			vegetables	sowing, ploughing, levelling, transplantation
7	Kartik	October-November	aus paddy	harvesting
			sugarcane	tying of sugarcane plants
			wheat	ploughing, levelling and manuring
			vegetables	ploughing, levelling, irrigation, transplantation, harvesting
8	Aghran	November-December	aman paddy	harvesting
			aus paddy	threshing
			sugarcane	irrigation
			wheat	sowing
			vegetables	sowing, planting, transplantation, harvesting
9	Pous	December-January	aman paddy	threshing
			sugarcane	irrigation
			wheat	weeding
			vegetables	irrigation, harvesting

Serial Number	Local Name of Months	Month in the English Calendar	Name of Crop	Agricultural Operations
10	Magh	January-February	aman paddy	threshing
			sugarcane	irrigation
			wheat	irrigation
			vegetables	irrigation, harvesting
11	Phalgoon	February-March	aman paddy	ploughing of seedbed
			aus paddy	ploughing of seedbed
			sugarcane	harvesting and irrigation
			wheat	irrigation
			vegetables	irrigation, harvesting
12	Chaitra	March-April	aman paddy	manuring seed-bed
			aus paddy	manuring seed-bed
			sugarcane	crushing
			wheat	harvesting and threshing
			vegetables	irrigation, harvesting

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GLOSSARY

Key

aa	long a, pronounced like the a in "calm"
ii or ee	long i, pronounced like the ee in "freeze"
oo	long o, pronounced like the oo in "room"

No retroflex consonants have been used. Phonetic transcription of Bengali words has followed the local pronunciation. In order to pluralise them only s has been added at the end of the Bengali words.

In the text, Bengali words have been underlined and have not been capitalised, with the following exceptions:

1. Names of months, festivals and rites, deities, and castes have been capitalised and not underlined.
2. Official government spellings have been used for terms referring to legislation, formal organisation, districts, towns, and villages. These names have not been underlined and no long vowel has been used.
3. The conventional transliterations have been used for names of individuals, languages, religions and religious sects, mythological characters and deities.
4. The word varna has been spelled in the conventional manner, underlined, and not capitalised, in accordance with common usage.

aagaldaar	a watchman of agricultural fields
aaltaa	a red fluid
adhyaksha	head of the village council
Aghran	eighth month of the Bengali Calendar
Agradani Brahman	a sectior of the Brahman caste that receives the first gift of post-funeral ceremony. It is ranked very low in the caste hierarchy
Ahir	it is a caste the members of which have specialised in cattle raising. It is the ceremonial duty of a member of this caste to mark the sacrificial bull with a hot iron at the time of post-funeral ceremony
Akure	a section of Dome caste
aman	a late variety of paddy that is harvested in winter
anchal panchayat	it is the second tier from the bottom of the four tier panchayati raj system of West Bengal
anchalik parishad	it is the third tier from the bottom of the four tier panchayati raj system of West Bengal
Annapurna	the Hindu deity that symbolises prosperity
Anukul Thakur	name of a religious preceptor
Asad	third month of the Bengali Calendar
Aswin	sixth month of the Bengali Calendar

aus	an early variety of paddy that is harvested during rains
ayemandaar	Muslim scholars who were rewarded with tax free land by the Muslim emperors in recognition of their merit in preaching and scholarship
baagaal	a cowboy of young age
baari	an indigenous system of borrowing food-grains
babu	an honorific term used for showing respect
Bagdi	a caste occupying low position in the Hindu caste hierarchy
Baishakh	first month of the Bengali Calendar
bargadar	a sharecropper
Bauri	a landless agricultural labourer caste members of which occupy a very low position in the Hindu caste hierarchy
begaar	unpaid forced labour
Bhadra	fifth month of the Bengali Calendar
bhadralok	gentlemen
bhayaad	a lineage group that is extended to a limited degree
bhokta	a special devotee
bideshi munish	seasonal labourers

bigha	a unit of land measurement, 0.40 acre
Bostom	a Hindu religious sect. In Basudha the Bostoms have developed the characteristics of a caste
botaare	a junior farm servant recruited on annual terms
botkhaanaa	the nearest English equivalent of botkhaanaa would be drawing room. It is a corrupt form of the original Bengali word baithokkhaanaa
Brahman	a priestly caste, the highest in the Hindu caste hierarchy
byaz	an indigenous money-lending system
chaddar	a cotton wrapper
Chaitra	twelfth month of the Bengali Calendar
Chandal	a synonym of Namosudra. It is ranked very low in the Hindu caste hierarchy
chashi	farmer
chhotalok	people belonging to lower Hindu castes of Bengal
chowkidaar	literally means a watchman. It is the lowest position in the organisational set up of the police department
crore	derived from the Sanskrit word koti meaning ten million

dadan	an advance payment
Daibak	a section of the Brahman caste that has specialised in reading horoscopes
dakshinaa	cash honorarium paid to a priest for his service
deashi	a non-Brahman priest
Deshpurohit	a section of Brahman caste who chants sacred verses at the time of igniting the funeral pyre. It is ranked very low in the Hindu caste hierarchy
dhaanbhaanaani	the woman who husks paddy
dhaincha	a kind of plant cultivated as green manure
dharmagolaa	a crop cooperative society
Dharmapuja	the worship of the deity of Dharmaraj
Dharmaraj	the principal deity of Basudha
dharma son	a relationship that is established through a ritual
Dhoba	a washerman caste
dhuti	a white piece of cotton cloth used as man's wear
dighii	a large pond
diksha	a secret formula used for meditation
do	sandy loam soil

Dome	a basket maker caste, occupying a very low position in the Hindu caste hierarchy
duni	a lift irrigation device
ento	the upper caste Hindus in general and the lower caste Hindus to a certain extent observe rules of untouchability about cooked food. The touching of such food requires an amount of ceremonial cleanliness from the householders themselves, such as bathing, putting on washed clothes etc. On the other hand, if someone touches cooked food his hands need to be washed. Even if a clean object comes in touch with cooked food or a container where cooked food had been kept that has to be washed. This latter type is known as ento in Bengal
fabra	a small wooden baton
firka	an administrative unit in Madras consisting of 25 to 30 villages and covering an area of approximately 40 to 50 square miles
gaari	a constructed ditch from which water is supplied for irrigation
gajan	the word ordinarily means the festival of Lord Shiva. The villagers use the word in a broader sense to mean festival

Gandha Barik	a caste that deals in spices
gnati	a lineage group
gomostaa	it is originally a Persian word largely used in Bengali. It means rent - collector
gram panchayat	village council
gram sabha	village assembly. It is the lowest tier of the four tier panchayati raj system of West Bengal
gram sevak	village level worker
grihastha	householder
guru	religious preceptor
haal	a pair of bullock
hom	sacrificial fire
Jaistha	second month of the Bengali Calendar
jajman	hereditary clients in the traditional workman - customer relationship
jajmani	a system of hereditary workman - customer relationship
jalachal	a group of people from whom a Brahman cannot accept drinking water
jalchal	a group of people who can offer drinking water to a Brahman
Janmaastami	a Hindu festival to celebrate Lord Krishna's birth day

jneo	annual payment of workman
jotedar	a sharecropper who gets a half of the yield
kaachi seer	a local unit of measure. It varies from 0.75 kg. to 0.80 kg.
Kaibat	a fisherman caste
Kali	an incarnation of the supreme Hindu deity, Shakti
Kalu	an oil presser caste
Kangsha	a Hindu mythological character. He is the maternal uncle of Lord Krishna
Karmakar	a blacksmith caste
kartar	head of the household
Kartik	seventhmonth of the Bengali Calendar
Kayastha	a scribe caste
kholaa	it is a measure weighing about 2.80 kgs.
kirsan	a sharecropper who gets one-third of the yield
kirsani	a system of sharecropping
Kotal	a village watchman
Krishna	an incarnation of one of the Hindu Trinity, Vishnu
Kshatriya	a warrior caste
lagdaa	a system of cash down payment

lakh	derived from the Sanskrit word laksha, meaning one hundred thousand
Lakshmipuja	worship of the goddess of wealth
maandaar	a senior farm servant recruited on annual terms
Magh	tenth month of the Bengali Calendar
Majhi	an honorific term which usually refers to a Santal headman
Malakar	a gardener caste
mandal	an honorific term used to mean the aristocrats
manib	master, ordinarily refers to landowners
mantra	sacred verses
Manu	the ancient Hindu lawgiver
matalshala	a village distillery and bar
maund	a unit of measure weighing about 38 kgs.
Mogheya Dome	a landless agricultural labourer caste members of which occupy a very low position in the Hindu caste hierarchy
moral	an honorific term. Here it means the landlord section of the Sadgope caste
mouzaa	it is originally an Arabic word, literally means village. A mouzaa refers to a habitation area and its surrounding cultivable lands

Moyra	a confectioner caste
munish	farm servant
murhi	parched rice
murzibhaagani	a woman who preapres parched rice
murubbi	respected old man
Nabaan	a harvest festival
naibedya	offerings of fruits and sweets that are made to the deity
Namosudra	a caste occupying a low position in the Hindu caste hierarchy
Nanda	a Hindu mythological character, he is the foster father of Lord Krishna
Nandotsab	a Hindu festival related to Lord Krishna
Napit	a barber caste
paaki seer	a local unit of measure. It contains 0.93 kg.
paalaa	an indigenous system of raising cattle and chickens on a share basis
paalki	a palanquin
paaraah	a separate section or quarters of a village in which members of a certain caste normally are concentrated
paatkuroni	a maid servant for domestic work

paai	a brass container used for weighing cereals
paise	plural of paisa, the one hundredth part of a rupee
panchayat	council
panchayati raj	a new system of village government instituted by the state administration in 1958 in order to decentralise power and authority
pandit	a sanskrit scholar whose duty is to watch whether all things are done in a ceremonially correct way. He is ranked very high
parivaar	family
Patua	a section of potter caste
Phalgoon	eleventh month of the Bengali Calendar
Pous	ninth month of the Bengali Calendar
pradhan	head of the regional council
pranaami	cash offerings made to the deity
pucca	masonry structure
Ramayan	one of the most famous Hindu religious books
Ramakarmakar	a blacksmith caste. It is ranked very low in the Hindu caste hierarchy

saajaabhagi	a sharecropper who works on contract basis
Sadgope	it is the name of a caste in West Bengal that practices farming as its livelihood
Santal	a tribe, found mostly in West Bengal and Bihar
Sardaar	a leader of the labourers
satranji	an indigenous carpet made of cotton
seer	a unit of measure weighing about two pounds
seikh	the commoner section of the Muslims
sharee	a piece of cloth with wide borders used as women's wear
Shakti	one of the supreme Hindu deities
shali	clay-loam soil
Shiva	an important Hindu god
Shraban	fourth month of the Bengali Calendar
shramdaan	donation of voluntary labour
shuno	loam soil
sidha	remuneration in kind
Sunri	a distiller caste
taluque	a subdivision of a district
thak	stratum
upadhyaksha	assistant head of the village council
varna	the classical four-fold division of the Hindu society

zamidaar	the nearest English equivalent of it is landlord. A zamidaar is a person who possesses some landed property and is responsible to the government for the tax of the land under his jurisdiction
zilla parishad	district council

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