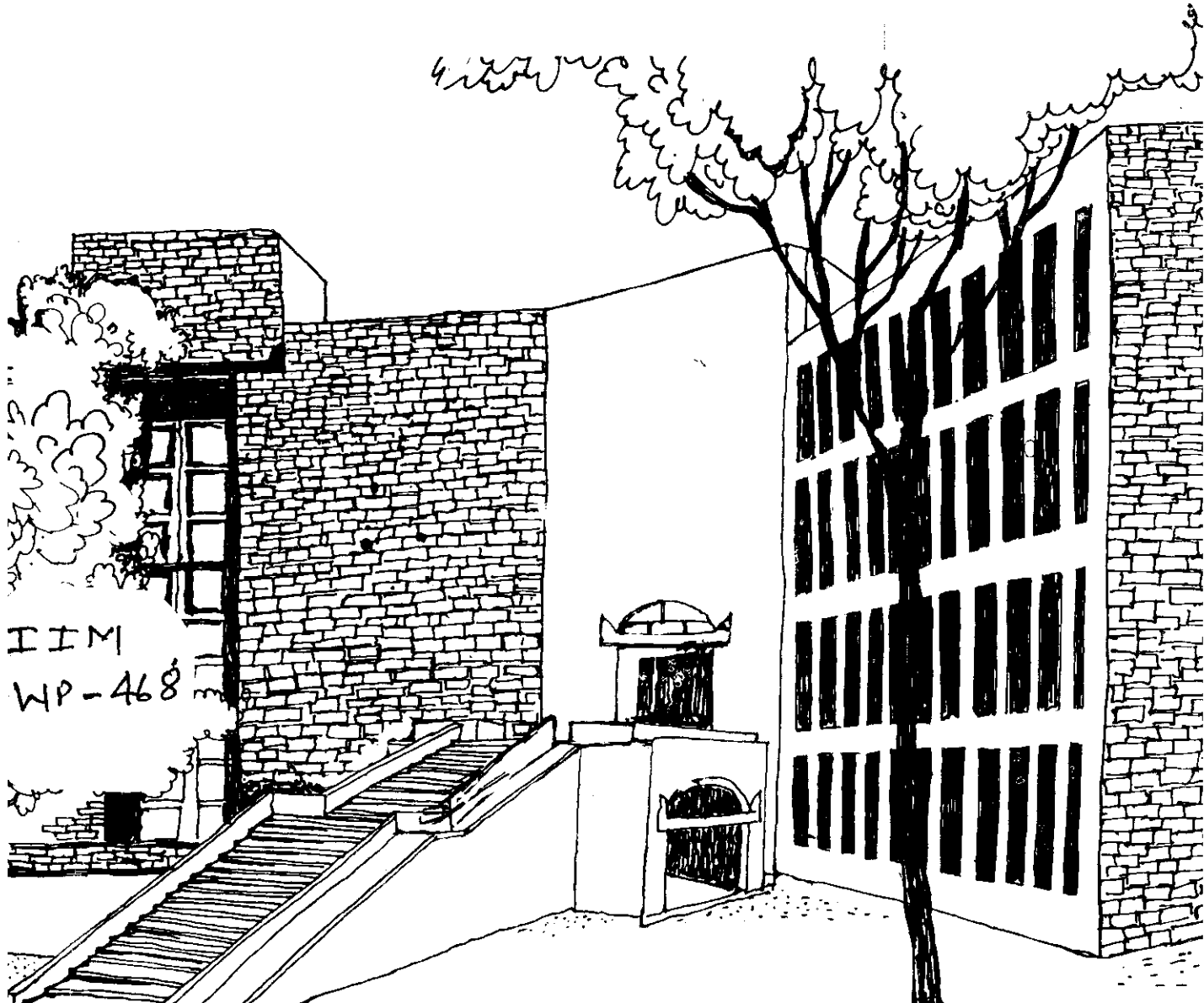




Working Paper



WHY POOR PEOPLE DON'T COOPERATE?
A STUDY OF TRADITIONAL FORMS OF
COOPERATION WITH IMPLICATIONS
FOR MODERN ORGANIZATIONS

By

Anil K. Gupta

W P No. 468

July, 1983

WP468



WP
1983-468

The main objective of the working paper series of the IIMA is to help faculty members to test out their research findings at the pre-publication stage.

INDIAN INSTITUTE OF MANAGEMENT
AHMEDABAD-380015
INDIA

A B S T R A C T

A question which has remained under explored in Research on the Cooperatives and Rural Development is whether the Western European Models of organizing cooperatives further based on Agri-business concept as it evolved at Harvard will be able to invoke cooperation amongst the poor and between the poor and not so poor in developing agrarian societies.

We have first defined the image of development which should provide the back-drop for any discussion on Rural Development. After making our assumption explicit, we have dealt with basically two issues:

- i) What are the basic features of traditional cooperation vis-a-vis modern cooperatives? The discussion would be illustrated with some cases in socio-ecological perspective.
- ii) How does one conceptualize the role of resources, risks, and skills in particularly marginal regions in invoking cooperation amongst small farmers and landless labourers?

The discussion on NODB's model of organizing cooperatives of milk producers provides a socio-ecological critique of strategies of replication often applied in developmental programmes.

In the last part, a brief discussion on theory of Cooperation has been organized around the concept of Olsen's logic of collective action. Besides, recent contributions on the issue of pooling and distribution, free-riders, common properties externalities and altruism and cooperation have also been discussed.

It is hoped that the study will provide the perspective for the emergence of more indigenous models of cooperative organizations which will be able to invoke cooperation amongst the poor as well as between poor and the institutions designed ostensible to serve them.

WHY POOR PEOPLE DON'T COOPERATE? A STUDY OF TRADITIONAL
FORMS OF COOPERATION WITH IMPLICATIONS FOR MODERN ORGANIZATIONS

Part I

Concern about rural development at national and international levels reflects not so much the sudden emergence of an enlightened elite bothered by widening income disparities, rural-urban migration etc. as the realization that, for sustaining dualistic developmental process, rhetoric of rural development helps in maintaining a facade of optimistic future. If revolutionary alternatives to egalitarian growth have to be avoided or delayed, the discussion on frameworks which can contain conflicts becomes imperative for two reasons. One, the growing discontent among the poor may rob the system of its stability which is essential for the elitist growth strategy. Two, the possibilities of providing a platform for negotiating conflicts of interest amongst the rich and the poor may sober the expectation of both parties from the system, leading to a more peaceful and patient search for better alternatives.

The role of cooperatives in rural development should be appreciated in the above perspective notwithstanding the fact that numerous researchers and practitioners have confessed repeatedly that:

I am grateful to Profs. Ravi J Matthai, Baviskar, Andre Betteile, Ranjit Gupta, SP Seetharaman, Samuel Paul, and Mr. Gangadharan V., besides the participants of the symposium on "Cooperatives and Rural Development" organized by Delhi University (1983) for their comments. Usual disclaimer however applies. Suggestions of Dr. Homans (Harvard University) have been particularly of use in revising the paper to make it (hopefully) more intelligible.

- a) Cooperatives cannot eliminate inequities; in fact they may exacerbate them. One should not expect cooperatives to compensate for ~~the~~ fundamental inequities emerging from inequitous land holding pattern or ownership of other means of production (Baviskar, 1980; Guhan, 1980; Harvey et al., 1979; Bennet, 1978; McGrath, 1978; Gupta, 1981).
- b) Success in rural development can be achieved only if all groups are fully integrated into and actively support the developmental process. For many years, self-help organizations (SHOs), in particular cooperatives, have been found to be suitable instruments for inducing the population groups concerned to participate in the decision making process though the cooperatives have often failed to serve this purpose (Ullrich, 1981).
- c) "Cooperatives are a form of self-help that increased incomes of the rural poor, but not all poor people are in condition to help themselves" (McGrath, 1978). By implication, one could argue that most of the marginal farmers (particularly those in semi-arid regions) having deficit in their household budget may be outside the purview of development through cooperatives, a point to which this paper will revert repeatedly.

If success of cooperatives contribution to rural development has to be measured "principally by their service to members" (FAO, 1974) so as to protect" their interest against exploitation by others" (Baviskar, 1981, p.201) then the question is not whether small members gain as much as the bigger ones or gain in proportion to their contribution but what are the determinents of

some people taking lead in formalising a cooperative structure, sustaining it and strengthening it as against others who prefer(!) to remain out or who do not cooperate even if they are inside it.

I would discuss later how when we conceptualize simultaneous operations of different classes of farmers and agricultural labourers in different markets - land, labour, product, and credit - the incentive or disincentive to cooperate or collide around a particular productive economic activity cannot be worked out for various people in a single-market framework. One of the greatest incongruency of current search for the cooperative alternative for rural development is the single commodity or uni-enterprise focus. In this context, Bennet's observation is interesting to note. He says:"... the poor lack money, and since institutional cooperatives require participants with resources sufficient to carry on viable agriculture, it has been difficult to devise an approach which genuinely benefits poverty populations"(Bennet, 1978(?), p.66, emphasis added). Sambrani also echoed this concern recently. (Sambrani, 1982, p. 268).

Bennet did take into account stratification while discussing the cooperatives and rural poor but he erred by assuming big farmers, small farmers, and agricultural labourers as homogenous categories for analysis. The fact that the majority of marginal farmers, at lease in semi-arid regions, are also labourers, craftsman, migrants, livestock, or pastoralist was ignored and thus the opportunity of identifying precise areas of cooperation or conflict among different classes of farmers was lost.

Perhaps it is also necessary to raise another question: if the cooperatives are instruments of collectivizing farmers' individual productive potential through agglomeration of market channels for their outputs or inputs so that they can get better prices or higher individual profits, why should cooperatives try to bring together only surplus producers whom market forces are also trying to bring together? In that sense, should cooperatives reinforce agri-business and market mechanism and if yes, should they weaken the adaptive potential of those whom market neglects or exploits? In western societies application of anti-trust laws is already raising this question.

Galjart, after reviewing numerous international self-help projects, complained: "There are almost always people who will not join but it is not clear why" (Galjart, 1982, p. 9). My paper addresses itself to this 'why' and disputes the contention that the people who do not cooperate or participate in cooperatives are oblivious of their own developmental potential. I will also argue that, while there is a need for training farmers leading to upgradation of some of their traditional skills, training to impart advantages of participation or cooperation will serve hardly any purpose because mankind is endowed with a basic instinct of survival that continuously guides man to seek what will sustain him.

Perhaps the problem can be better analysed by beginning with the question: which image of 'development' is compatible with 'cooperation' to exist in a cooperative framework?

Rural development is a process in which poor rural dwellers who constitute the majority of numbers though with much lesser resources participate in such productive economic and other activities that progressively increase their share in total resources.

It has to be noted that

a) Rural development is not a process of ensuring proportionate return to poor and rich for their respective contributions. Marginal utilities being different besides the positive differences in the consumption-income levels of poor, the proportionate share will at no stage bridge the disparities. Poor must grow at a faster pace than rich to be ever able to catch up.

b) Rural development is not a process of maintaining the disparities at current level. Many times development planners claim that cooperatives by ensuring fair price to everybody's output at least do not discriminants in favour of rich and thus do not exacerbate the disparities. One should note the following points in this regard.

- i) Any marketing channel to be viable needs a minimum amount of output. Many times poor contributors provide the threshold quantum of output which makes the enterprise viable only for larger contributors.
- ii) Value addition and surplus accrual on account of viability of the enterprise are almost invariably ploughed in such a type of diversification of production or services that helps larger contributors more than the poor. Thus poor pay more and receive less of those services.
- iii) Equal or same price is really not a fair price looking at inherent disparities in transfer prices of services.

c) Rural development is not a process of involving poor to make sacrifices 'now' so that richer people could accumulate capital now, invest it in some enterprise 'tomorrow' and generate jobs, income-earning opportunities later.

✓ At the given level of vulnerability, the capacity of poor to further limit consumption is very low. They do so only because the options are few. Even option of exit or silence or non-participation is not always available (e.g. big farmers default and cooperative credit societies become ineligible for further borrowing, the small farmers who paid in time are also ineligible to receive further credit).

d) Rural Development is not a process of decreasing self-reliance potential of poor and making them more dependent on markets on which they have no control.

✓ Introducing such technologies which do not make use of traditional skills and local resources invariably increase dominance of markets over individuals. Access to markets/bureaucracy which rich invariably have converts apparently a scale neutral technology to resource biased technology.

Thus in the cooperatives of unequals, neutral institutions will not promote development because conflicts are bound to emerge whenever the majority (the poor) try to enforce a greater return to the poorer members. Institutions which promote, fund, or supervise cooperatives will have to reinforce the strength of the poor who despite majority, may lack capacity to influence decision of the 'cooperative' body.

The image of development which emerges here is not compatible with the dominant myth of development through cooperatives propagated by institutions like the international Cooperative Alliance which very genuinely believe in cooperatives of and for viable producers in whom agri-business, MNCs, market forces etc are all interested. In fact one of the recent ICA project documents voices the above concern very vividly thus: "Small farmers are reluctant to take risks and are quite rationally more concerned with their own survival rather than development oriented (sic) a fact ignored by the existing developmental institutions including cooperatives whose facilities do not reach small farmers, and in which small farmers do not participate in institution building though these institutions are geared to serving their interests"(ICA/RTI/NCC/CLT Res. Project document No. 14, 1980 emphasis mine).

What else should be the concern of deficit budget poor farmers than struggle for survival which implies their involvement in several markets simultaneously? They do it precisely to offset disadvantage in one market at one moment with little advantage that they may be able to oke out by operating in another market at another moment(Gupta, 1981 b).

If the survival mechanism of the poor call for strategies like shuffling of enterprise through operation of bundle of enterprises rather than specialization in any single output market (Gupta,1983) which cooperative institutions of which he is made a member do not try to strengthen, how and why should he participate and cooperate in the task of strengthening such institutions? What else is developmental orientation than ensuring

one's survival with dignity, self respect, and self reliance if possible?

Perhaps this discussion should help in clarifying one issue quite unambiguously; that the model of cooperatives, that emerged in countries with much lesser imperfections in information, infrastructure, and related market institutions than is the case in developing countries, will not breed cooperation amongst members in developing societies no matter what the cooperative researchers say; e.g. "in general, the poorest farmers are better served by cooperatives that include some members of higher income group...."(McGrath, 1978, p. 48).

The question still remains: why don't poor cooperate/participate in institutions ostensibly designed to serve their interests? Why have cooperatives world over have not been able to include poor in their fold? And, whenever small farmers(not necessarily poor farmers) do participate, their ability to influence the power networks still remains handicapped. I have discussed elsewhere how, taking socio-ecological characteristics into account, one can see why incentives for cooperations will be different to different classes of poolers of resources and skills(Gupta, 1981, p.6).

I intend to deal with primarily following issues in next.

- (i) What are the basic features of traditional cooperation vis-a-vis modern cooperatives? The discussion would be illustrated with some cases in socio-ecological perspective.
- (ii) How does one conceptualize the role of resources, risks, and skills in particularly marginal regions in invoking cooperation amongst small farmers and landless labourers?

In the end, I will try to propose some hypotheses which may hold the key to the question: Why the poor do not cooperate with- in the cooperatives?

Cases in Traditional Cooperation - Mutual Aid and Hilsa Fishing (Gupta 1979)

Socio-Ecology: Highly stratified village of fishermen and agriculturist in West of Calcutta, average annual rainfall 60", most houses kuchcha, season for fishing June-September. The village has 17 boats. Food and messing done on the boat. Initial cost borne by the owner of the boat and later recovered from the individual shares of the crew as below:

- (i) One share for every member of crew including owner if he is sailing
- (ii) One share for every twenty pieces of net
- (iii) One share for the owner of boat

The ratio of ownership to implements to labour is 1:3:8.

Case II

Socio-ecology: Village situated on the bank of River Hoogly on the international route of ships. Average annual rainfall 67". Stratified village bigger than the earlier case. Small farmers grow vegetables while bigger ones grow coconut, bananas, and vegetables. Scattered settlement system like the earlier village. The village has 52 boats owned individually but operated collectively.

Pooling: 8 - 10 boats are required but whenever entrepreneur can procure 'Kochal' net carried by a boat of larger size with greater risk, a special Kochal boat is required. The technique is capital intensive requiring heavy ropes, several boats, and costly nets, besides entrepreneurial risk. Some times Jangla net is also used.

Sharing: In a boat of 8 men crew, each man has to procure twelve pieces of nets with the total number of shares becoming 37 to be divided as follows:

Owner of boat	5 share	x 1	= 5
Each member	2 share	x 8 No.	= 16
12 pieces of nets	2 shares	x 8 No.	= 16
			<u>37</u>

Ratio of Ownership: Labour: Implements: 5:16:16

Besides the majhi(the oarman) gets an extra share from the boat owner's share; the owner recovers the cost of food and water storage from others; those who borrow nets have to give proportionate share to the owner.

Implications

With need for different but special skills, equipments or tools/nets, etc. there is a complementarity between each skill so much that an unit of operation(i.e boat) cannot be operated without pooling of resources by several people that too in a highly hazardous environment 100 miles deep in the sea. The presence of very high interest rates charged by money lenders within the village or crew with tacit obligation to accompany the group to catch fish indicates unequal exchange relations. The most notable feature is the premium on skill and implements(i.e., nets) rather than ownership.

In modern organizations, the pattern is reversed. The forms of pooling, mutual dependency, and possibility of exploitation in the fishing group are limited by the factor of skill specialization and supply of specialized skills. Localized nature of operations and need for greater ecological affinity precludes large scale market penetration such as to lead to migration of

people from one place to another (though the fishing community like Bhois is known for their skill and often travel long distances; however, the norms of pooling amongst them are largely contract-based, intertwined by the kinship network).

The role of entrepreneurial risk, cost of organizing and providing basic provision or resources, familiarity with technology (kochal or jongha nets) together with the size or scale of operations are the variables other than skills which play an important role in defining the norms of pooling and redistribution. It must be noted that the share of labour is the highest in more backward/localized/low scale based operations whereas it equals that of implements in the comparatively higher order operations.

The issue that arises from these two cases is how does one conceptualize the norms of converting various resources, skills, and associated risks into equities such that redistribution of outputs generated through a collective action not only remains as far as possible favourable to poor labourers or marginal producers but also that a premium is put on their skills so as to sustain this relationship.

Could modern cooperatives encompass the ecospecificity in development of norms of pooling and redistribution leading to the process of development by reducing disparity in ownership of means of production through differential pricing of various contributions like ownership, labour skills etc? Could the technology be such that uses complimentary skills and can be operated at a size that can sustain collective behaviour cooperatively and democratically? These are some other questions that have to be raised in this context.

Honey Collection, food gathering and hunting by Chenchu Tribals (Andhra Pradesh)

Case III

Socio-economy: Farahbad is a small Chenchu village, 12 households, situated in a deep forest with rich deciduous vegetation. Nine honey deposits communally owned by the whole band. Honey collection requires complementarity between different skills. Out of 15 members, 11 have various skills:

- a) ascertaining whether a comb had honey or not;
- b) raising initial investment and forming group;
- c) making a rope and cutting triggered pole;
- d) assisting honey collector by passing various implements like smoke torches, bamboo knife, basket etc.;
- e) extraction and processing of honey.

Besides provision of implements, the task of distribution is crucial for the group sustenance.

Pooling: Rules of the game are as follows:

- a) Territoriality : Communal ownership
- b) Leadership : Does not entitle itself with any extra economic privileges
- c) Skills : The group is lead by honey collector, and traditional leader may in some cases be an ordinary member. In hunting also, several skills are required, all of which don't happen to be with any one person. The skill specialisation breeds inter-dependence and mutuality of expectations.

Sharing: The output whether honey or game is shared equally amongst all the members of village even if some did not participate in the activity.

Implications

Major lessons are derived later but it is worth mentioning here that the time span in which each pooler evaluates his gains and losses from the participation in cooperative task is very long. This helps in generating an expectation that non-participating members at time T_1 in Activity A_1 will contribute their share at Time T_2 in Activity A_1 or A_2 , A_3 etc when some of the earlier participating members may choose not to participate. The book of accounts is not tallied at the time of every transaction. Unlike conventional myth that tribals live from day to day and have no sense of future, the illustration brings out that for cooperation to be generated in a diversified resource ecology though abundant in nature, the time-frame for discounting one's cost and benefits is very long. The moral values and social norms provide for serious strictures for any violations. The justice being enforced collectively and explicitly, every violation reinforces interdependence rather than independence. However, the limitations of the model are that size is very small, activities and multi-skill based, resources are abundant, and wants are very few.

Honey sometimes is sold to buy grains though the exchange within the band is less articulated than between settlements having foodgrains surpluses vis-a-vis those with honey surpluses.

Case IV

Socio-ecology: Nagalutigudem is situated at the foothills of Nallamalai hills of Kurnool district. Because of extensive deforestation and planting of new exotic species, ecological balance has been disturbed. The household economy, being no more dependent upon forest-based products, has diversified into labour

market and other sundry activities. There are 42 households having 3 sub-groups.

The traditional village leadership has become very weak. Forest Department officials appoint the village leader. There are 2 honey deposits both privately owned, one by a group of five families and the other by seven families. Eight persons have honey collection skills. Combs are scarce but skills are in abundant supply. Out of 8 persons, 5 members are owners of honey deposits.

Pooling: a) The initiative is taken by one of the senior owner of the comb rather than village leader which could happen in the earlier case.

b) All owners contribute some money for initial investment.

Operation and Sharing

Leadership in the task of honey collection is provided by the person having skills of honey collection. Rituals are associated with task allocation. Fixing up of loop and setting up ladder is done by the brother-in-law or nearest kith and kin of the person who descended in the valleys for collecting honeycomb held in rocks. The skill and possible exploitation of its advantage is sought to be counteracted through kinship networks. Shares are as below:

- (i) Owners of the comb have to give at least 5 kg. of honey to the chief honey collector who in turn shares it with his brother-in-law or concerned relative.
- (ii) Owner takes away the honey equivalent to the cost of initial investment.
- (iii) Remaining honey is distributed in following manner;
 - One share to all participants including owner and collector;
 - One share for the owners even if they did not participate though they must have given initial investment.

- (iv) One share to ritual specialist and one to the village leader if he is involved in organizing team or any other task. Other non-participating members of village do not get any share.

Rules of the game are:

- (i) Territoriality: Though ownership rests with the village, exploitation of gum, honey, and other forest produce is done by the respective groups which have traditional rights of exploitation.
- (ii) Share in honey is proportionate to share in costs or labour.
- (iii) Food to all is provided by the owners.
- (iv) Initial investment could even be met by a single person and the share equivalent to that would accrue to him.
- (v) The skill of chief honey collector is rewarded through extra shares.

Implications

Market penetrations and assertion of individual rights have made a distinctive difference to the norms of pooling and re-distribution. The time frame in which poolers work out their benefits and costs is much shorter than the earlier case. The cooperation involved is partly reciprocal and partly economic. Altruistic components of cooperative behaviour are highly subdued. Skills were given still some importance though not as much as ownership. The share of labour comes down considerably.

Case VI

Mannanore is a multi-caste village with predominant agricultural activities. It is situated just outside Srisalem reserve forests. The village has more than 500 households out of whom about 70 are Chenchus. It is well connected to the nearby tehsil town. Major source of income is labour and cultivation on own lands. Combs are many but skill is scarce.

Rules of Game Pooling

The labourers are employed on daily wage basis by the chief honey collector if he is also the owner of combs. If owner and collector are different, the labourers are hired on contract basis. Food is provided by the owners who generally supervise and manage the activity rather than actually participate in it. Owner can get wages for work if honey collector agrees.

Redistribution

No shares are fixed for various constituents as mentioned in earlier cases although labourers are provided some honey. The chief honey collector gets additional Rs.20. Honey belongs to owners who sell it to cooperative marketing store or private traders. The money is equally divided amongst all owners. The contract system was preferred to reduce risk and under this this arrangement generally 25% honey was given to labourer and collector.

The cooperative marketing depot did not have any functional cooperative machinery to organize the marketing of output. It was cooperative because there was a provision for share capital contribution. The management was with the government officials who waited for products to arrive unlike traders who went to sellers directly.

The market penetration being very high, the practices of wage contract, leasing out of comb, etc. indicated complete dominance of capital over labour. The skills had only marginal premium. The norms of traditional cooperation became very weak and the individualistic cultivation further reduced the interdependence.

Basically three models emerge from the cases about food gathering and hunting tribes.

Model One: (Illustration one)

- (i) Territory commonly owned, i.e. the area of operation regarding hunting, honey collection or food gathering belongs to everybody in the tribe;
- (ii) Re-distribution is independent of pooling, i.e., no matter how many people participate in a specific task, the produce collected or generated in the process is shared amongst everybody;
- (iii) In the absence of individual ownership, excellence in various skills determines the leadership roles. Leader in one task, say food gathering, becomes a follower in another task, say honey collection, where a person skilled in honey collection becomes the leader. Iterative leader-follower-leader process controls the emergence of autocracy.
- (iv) Each group will do what is generally decided by the traditional leader. However, it does not curb initiatives of various sub-groups to identify members of production or collection groups on their own.
- (v) Since every activity requires a number of skills, therefore, the tendency for any particular skilled person to acquire an exclusive authoritation power is counteracted through interdependence and iterative leadership as well as collective rewards.

Model Two:

- (i) There is individual ownership in the territories and the owner gets a share even if he does not participate.
- (ii) Shares otherwise are proportionate to the contribution in any specific group activity.
- (iii) It is generally the owner who initiates the formation of the group.
- (iv) Despite the rights regarding the ownership being distributed amongst various sub-groups of a tribe, the group has a overall control over the territory.

Model Three:

- (i) The ownership on territory and honey combs is extremely explicit.
- (ii) The groups are organized by the owner but payment is made on wage contract basis rather than on share basis.
- (iii) The traditional leader extracts a tribute.
- (iv) The kinship network controls the territories.
- (v) Share is also given to various market functionaries like forest officials, contractors, traders, etc. The share of labour goes down considerably.

The basic implication from the above three models for modern organizations appears to be the decadence of the primacy of skill as one moves from most primitive to most modern forms of social organizations together with decrease in share of labour in the output. It appears that in various modern organizational theories which emphasize de-skilling as a necessary feature of extending managerial control over workers, it is realized that in the process of skill building and specialization, there may have to be greater interdependence between workers and owners which may reduce the ability of owners of resources to control various actions of the members of production process.

The conflict of interest amongst various members of an organization is conceptually tenable with the emergence of working condition that need not be necessarily exploitative for weaker partners in the exchange (Gupta, 1982). We will discuss later how resources, risk, and skills in backward regions or marginal economies require a different framework of equivalence to generate cooperation amongst poolers that ~~such~~ disparities amongst them progressively get reduced.

Case VIIBeeshu - Rotating Savings and Credit Association- Maharashtra

The 'Cheetus' or 'Beeshus' are well known traditional mechanisms for mobilizing savings. In different regions, different variants of this practice are noted.

Socio-ecology

Warwandi is a partly irrigated village on the uplands. Soils are poor and partly undulated. Productivity is low. It is a multi-caste stratified village with the predominant caste being Marathas. The weaker sections include fisherman, harijan agricultural labourers, and artisans.

Pooling

Marathas, the high caste landed community had organized a ROSCA - 'Beeshu' several years ago. Most of the members had irrigated lands with sugarcane cultivation. The individual contribution was Rs. 1000 or so per month. The collected amount was bid for by various members. The discount money was distributed as dividend amongst the members. There was at times very high competition at the time of bidding.

The Beeshu of Harijans was started about a year ago when a person had to pay dues of a moneylender. This person had paid equivalent to the principle sum which had been adjusted toward interest with the original amount intact. Several of harijans got together and decided to pool Rs. 50 - 100 each per month. The amount collected first time was used to pay back the loan of the person concerned. The understanding was that there would be no bidding or auctioning of the chit or collected amount and hence no dividend. The group

would collectively decide whose need was most important and accordingly the collected sum would be given to him.

Implication

The absence of competition, discount, dividend and thus the underlying ethos of want satisfaction as against need fulfilment amongst Harijans indicated a very different economic and socio-cultural ethos determining the form of cooperation. Some of the Harijans worked as labourers in the nearby government farm and had more or less regular source of income. The arrangement designed thus did not include the most vulnerable ones, though most of the members were quite poor with only very small dryland holding except one or two families which had access to some irrigation.

Modern Cooperatives

Case VIII

The National Dairy Development Board (NDDB) is an apex organization set up by Ministry of Agriculture in 1965 at Anand to replicate the Amul pattern of milk procurement, processing, and marketing through an organization of 3-tier structure comprising village cooperative society, district cooperative union, and state level federation. A detailed review of the Anand pattern is available elsewhere (George 1983, Gupta 1981). An exhaustive microlevel study of the process and impact of dairy cooperatives on rural development in Gujarat has been recently conducted by Baviskar(1983). I will deal with only the ecological setting in which it evolved and the issues in replication. I will also discuss how the agri-business model based design of promoting milk production will leave the marginal farmers and landless labourer on the way side. The paradox of mal-development would become further

conspicuous when we discuss how the semi-arid regions that were the traditional habitat of most of good dual and single purpose cattle breeds have been bypassed by the model of cooperatives evolved at Anand in Gujarat itself, not to mention the rest of the country.

Socio-Ecology

Kaira district is one of the most prosperous regions of the state. It ranks first in the state in the population of milch cattle, ninth in the total livestock, fourth in fertilizer consumption, first in intensity of irrigation, fourth highest in the proportion of agricultural labourers in total workforce, third in population density, and second in foodgrain production, particularly bajra. In terms of allocation of institutional finance, Kaira ranks second in total outstanding credit and ninth in total deposits. Interestingly, despite a most favourable agricultural resource endowment and market infrastructures, Kaira also ranks sixth in overdues of long term cooperative loans and second in cooperative overdues. Abundant supply of green fodder and moderate climate offers the ideal niche for breeding buffaloes which incidentally is a subsidiary activity.

The demand for milk within Gujarat is not very high unlike northern states where on every corner in any town, one would find a milk shop. Thus distant markets like Bombay, posed a very different challenge here compared to regions where nearby markets for milk existed. Competition from private milk traders would be much more high in the latter case where price imperfections were also likely to be much less.

The majority of milk in Anand Dairy was processed into byproducts whereas in some other states like Andhra Pradesh, the major part of milk had to be supplied in liquid form (to Hyderabad).

Pooling

The Anand model of cooperative evolved from below from village level to district union. Federations came about much later when it was discovered that different unions were competing with each other thus leading to collective losses. Even today, Gujarat has a federation comprising unions of better districts. The districts with much higher population of livestock like Kutch but with very low population density and attendant heavy cost of transportation are not included in the Federation. A separate corporation looks after dairy development in such regions.

Every member of a milk cooperative society contributes milk to the collection centre and receives payment in the evening or next day. Besides this, he is entitled to several facilities like mobile veterinary care, subsidized cattlefeed, artificial insemination for cattle etc.

The unions comprise elected non-officials and undertake all the three activities, namely procurement, processing and marketing. Payment is made on fat percentage basis with minimum SNF (Solid not fats) proportion rather than on SNF basis which would have been probably more favourable to cow owners. However, since most contributors in Kaira had buffaloes, the milk price payment formula understandably had to favour fat percentage.

Redistribution

The bonus earned from the value addition to milk and margin in sales is distributed amongst members in proportion to their supplies. The veterinary services are priced at the same rate for small, landless, and big farmers with the assumption that similar price is the equitable price. The leadership of village societies in most of the villages is in the hand of big high caste people. In one of the villages, the president of the society was continuing in office for more than nine years. He also was sarpanch of the village and member of the board of Amul Dairy.

Replication

NDOB is replicating the Anand pattern in all regions despite the fact that incentives for cooperation and mobilization have to be different in different ecological regions (Gupta, 1981).

The essential features of replication are discussed below. It may be worthwhile to mention that in the stated objectives, NDOB does not include organization of milk cooperatives as the avowed purpose (NDOB Annual Report, 1980-81). The major objective is stated to be organization of national and regional milk grids so as to "enable modern dairies in Bombay, Calcutta, Delhi and Madras to capture 'commanding shares' of their liquid milk markets".

NDOB is the only corporate system in the country which receives foreign aid directly and whose accounts are not audited by the Comptroller General of India. In other words, the functional autonomy of NDOB is unique and its leverage very high in the national politico-administration set-up.

The methods chosen by NDDB to replicate are not always very participative, democratic, or flexible. In fact, NDDB's greatest burden is the success which it has behind it. As Paul (1982) has suggested, "if one looks for at least one public developmental programme that has achieved its purpose undoubtedly one could not mention any programme but Operation Flood I - in which the strategy aimed at stabilizing milk supplies to the four metropolitan cities by helping the milk producers to build up their cooperatives in 18 districts in the cities, hinterland rural milksheds." (NDDB 1980-81). It is another question whether success of a developmental programme should be measured by the outputs or by looking at the process and the institutions established to achieve the outputs. We will describe the process and the nature of institutions set up by NDDB in different states to argue that the cooperatives of the type being established will not promote cooperation and development of the rural poor.

Replication of process and institutions

- (i) As mentioned earlier, the cooperative at Anand had evolved from below but while replicating, NDDB had insisted that a federation should be set up first followed by unions and primary village milk producers' societies. The historical model was inverted upside down.
- (ii) In the absence of union and primaries, it was obvious that the federation would comprise only state government nominees. In Rajasthan, Haryana, Andhra Pradesh, membership of Federation did not include elected presidents of district milk producers unions.

(iii) The NDDB feasibility studies conducted for setting up dairy plants invariably select the best endowed regions. In fact, in one of the states (Andhra Pradesh) when a feasibility study by NDDB proposed setting up dairy cooperatives in already well developed coastal districts, the then M.D. of the AP Dairy Corporation strongly objected and the report was rejected. It was not coincidental that a leading private sector milk processing firm also had chosen the same area for its milk processing plants. Subsequently, in view of the history of social tensions in the state, fear of increasing regional imbalances and primacy of role of cattle in drought-prone regions, the state government changed the plan to give first preference to backward regions. This was probably the only state which could stand up to the pressure of the all powerful chief of NDDB and resisted the idea of setting up a federation. In fact largely to prove that it could establish a dairy project without NDDB's aid (the string attached to the model), the state dairy corporation set up a plant in 18 months which probably still was a record (Aurora, 1982).

Later this state also had to succumb to NDDB's pressure and agreed to set up a Federation. However, the operational policies of APDCF were still quite different from other federations. Recently, it is learnt that this federation had decided to close the milk routes in backward regions where the cost of milk collection was more than the price recovered.

(iv) It should be noted that parameters of the organizational design evolved by NDDB are organically suited to the context in which it evolved. The viability norm for a milk route in a high population density region will have to be different from the norm for a low population density region. However, NDDB norms prescribe uniform standards without any possibility of adaptation.

The result is that the regions which were backward and thus had lower order surpluses would never be included in the operating environment of the organization designed to deal with better endowed, low risk, high surplus regions. Interestingly, it was again APDC where Mr. Daljeet Aurora, M.D. made a case for incurring losses and pleaded with the State Chief Minister as well as the Central Government for approval. He argued that one could not ignore the regions where transportation cost was high. The development of such regions could be promoted through dairying as mentioned earlier because in dry region, livestock was the anchor of a poor household. Livestock helped in hedging the risk and not compounding as argued by Sambrani (1982, p. 268). The role of the state in ploughing resources to backward regions which could not attract market forces thus could not be overemphasized.

(v) In the original design, the three functions (procurement, processing, and marketing) were under one command - the union. However, in most of the states particularly Rajasthan, the dairy plants were owned and managed by the Federation through a cadre of dairy engineers; milk procurement was a responsibility of the union headed by Animal Husbandry Department officials (later absorbed by the Federation). It was quite paradoxical that conflicts should take place between milk plant and milk procurement wing of the Federation. The plant engineer measured his success on a parameter which was absolutely different from that of the union executive. Union officials had to deal with farmers and whenever complaints arose about weighment, fat percentage etc. it found itself powerless vis-a-vis the dairy plant engineer who considered his job as milk preservation and transportations to places advised by the Federation; no matter procured from whom, where, and how.

(vi) In Gujarat, even today, the unions were free to fix prices of its inputs and outputs to a considerable extent. In any case, since even the Federation comprised actual presidents of the unions, there was no clash between the union and the federation. In Rajasthan as well as many other places, conflicts were frequent.

(vii) Surplus generated through pooling of milk supplied by various classes of farmers was not ploughed towards one activity which concerned the poor milk producers most. This explains the most unfortunate neglect of fodder and pasture development in the NDCB model despite the fact that traditional milk tract was the region where milk production was largely based on pastoral economy. This neglect becomes all the more serious in view of the new crossbred technology being introduced which is sustainable only under the assured conditions of green fodder, well ventilated shed, water, veterinary care, concentrates etc which cannot be arranged by a traditional arid-semi-arid dairy farmer. Further, the dry fodder prices, which have increased considerably in last few years (as high as cereals in some states) due to decline in total availability because of dwarf varieties and increase in demand from irrigated cash crop based livestock farmers, have hit the poor dairy farmer further hard.

The traditional norms of fodder sharing or allowing landless Harijans to graze cattle on fallow lands are fast disintegrating. In fact, I have a fear that serious violence may erupt within the next few years on the issues of grazing in dry regions. The signals are already appearing. The internationally aided programme of rural development through dairy cooperatives somehow appears to miss these signals totally. Market development for fodder, grasses, and pastures is affecting the landless most adversely.

(viii) Traditional exchange or even free distribution of buttermilk to the poor is fast disappearing. Butter milk was a cheap source of nourishment for expectant women, and children and in the absence of this source, one could expect some worsening of their nutritional status.

(ix) While traditional livestock breeding in many areas ensured that farmers need for draught animal as well as milch animal (with high fat low quantity of milk) was met, the new breeds do not do that. Commodity specialization though agribusiness may not help a marginal farming household in diversification opportunities. Scarcity of bullock power affects the ability of such farmers to intensify agriculture and engage in cash crops cultivation which insulates them from another commodity market, say sugarcane or other such crops.

(x) With commercialization of pasture lands, government waste lands or panchayats lands also become source of conflict because the well-off farmers will like to optimize returns to their investment in livestock animals by increasing their access to common property lands.

(xi) Cooperation in milk cooperatives is conspicuously absent (Gupta, 1982) as revealed in a detailed study of milk cooperatives in Haryana. Some conclusions of that study are given below:

- (a) While cooperatives are commodity based and sectoral in nature, a marginal farmer does not compartmentalize his perception of opportunities in various resource markets. The concerns of farmers do not disturb the cooperative structure which does not derive legitimacy from the support from farmers but from some norms and procedures of the government and the cooperative federation.
- (b) Farmers' do not perceive cooperation as an uni-enterprise phenomenon. In interpenetrating credit-product-labour markets, the farmer, while choosing to cooperate with another farmer, takes into account the conflicts or identity of interests in various markets.

- (c) In the event of a conflict, the traditional sources of authority became the reference point rather than the decision centres of the cooperative.
 - (d) Organizational design evolved in a specific ecological niche cannot be replicated without hazards regardless of the merit of project approach (Seetharaman and Mohanan, 1982).
 - (e) While it is the women who traditionally maintained the cattle, the training for better management was generally given to males. This had obvious disadvantages.
- (xii) Lastly, the massive national programme of cooperativization NCOB style is crucially linked to the EEC aid. Much of the growth in output of European SMP since 1950's can be explained by the increasing quantities of skimmed milk passing through dairies. Reasons responsible for this trend are:
- a) Between 1960 and 1975 deliveries of cream by farmers to dairies fell by 85% and this was substituted by whole milk with the result an additional 1.6 million tonnes of skimmed milk was available at dairies.
 - b) As the farms became larger, problems of handling and storing liquid milk became greater and instead of skimmed milk other feeds were used.
 - c) In EEC, except Denmark less than 5 percent of available liquid skimmed milk was fed to livestock on the farm where it was produced.
 - d) Dairies also wanted to maintain throughout at optimal levels so as to reduce operating cost for which retention of skimmed milk for processing was preferred by dairies against returning it to farmers for being fed to animals. (Doornbas, 1982). Undoubtedly, the interests involved in spreading so called cooperatives are many (including big farmers of Europe) but they do not definitely include the rural poor.

A recent study on the emergence of a dairy union at district level made thorough analysis of minutes of monthly meetings of last ten years and personal visits clearly revealed that various initiatives which were being taken in the early phase of evolution of this loose organization were severely inhibited progressively as the role of the federation and NCOB increased. The local

level resource specificity of the organization was nullified by resorting to top down administrative approach of the Federation comprising only three or four of 16 district unions in that state. Even these representatives were district collectors who were chairman of these unions. While in Gujarat, the federation and dairy corporation both existed, no other state could receive the NDCB aid till a federation was set up. Further while in the original Amul model, various district unions were allowed to fix prices, no freedom in this regard was now available to unions. Many other contradictions in the model as it evolved and the model as implemented were discovered (Gupta and Khanna, 1983).

Thus if the poor have remained out or are finding it difficult to sustain their traditional livestock based economy, some of the reasons could well be related to the design of the Operation Flood strategy which has positively inhibited the emergence of more organic forms of organizations this indigenous forms would have emerged from below probably the Amul way, slowly and steadily. The close parallel between agri-business private sector market oriented approach and NDCB's strategy also reveals how far the modern cooperative strategy based on western-European model will work in the backward regions. More elaborate arguments are presented elsewhere (Gupta, 1981; 1983).

A few of the basic assumptions of agribusiness approach as it evolved at Harvard in fifties as drawn from Feder (1976) are given below:

1. Reliance on private market forces
2. Commodity approach
3. Reliance on social structures as they exist

4. Vertical and horizontal integration of agricultural activities (production to marketing) under the control of single firm or a combination of least possible number of interrelated firms.
5. Extension of credit or inputs to producers on the contractual condition that producer must deliver their output to lender/supplier under pre-arranged terms of sales.
6. Abundant supplies guaranteed with minimum risks - risk being shifted to producers whose say is minimal.
7. Reliance on viable producers, viable markets and viable regions to maximise profits with minimum cost and time.

In the modernization strategy of development, heavy emphasis on manufactured input or other facilities was inherent. When many of such inputs could not be arranged locally, the role of multi-national corporations became very important. With integration of more and more viable producers into a viable business system, selection of markets and strategies of development reflected the concern of these producers or consumers.

Perhaps, the discussion on NDCB's style of operationalizing the theory of cooperation as evolved at Anand will bring out why the agribusiness bias will always leave marginal farmers out of the fold of cooperatives. It also highlights how Operation Flood I and II continue the tradition of C.D., SFDA, and other such development programmes which helped, if at all, the small farmers at threshold rather than at the bottom, a fact conceded by even advocates of the Amul model (Sambrani, 1982, p. 268).

Few other implications of NDCB's approach to rural development through cooperatives need also to be mentioned to highlight how logical reasons exist for the poor not to participate or cooperate.

Resources/Skills

(i) The greatest strength of the poor lies in the labour market even though abundant supply may make their position quite vulnerable. The technology, equipments and institutions emerging under the aegis of NDCB's strategy of Operation Flood II are capital intensive. The skills required in crossbreeding, milk processing, and marketing are such that they do not match with the traditional skills of the landless or marginal livestock farmer. In the low population density regions endowed with pastoral economy, farmers grazed the less productive, less costly and less risky livestock breeds and extracted butter and oil (ghee) which was less easily perishable, had longer keeping life, and could be transported easily. The byproduct butter milk provided a cheap nutrient base for the entire family. The marketing strategy, technology, of preservation and links with the demand system were accordingly designed in the traditional system.

(ii) The traditional varieties of millets grown in semi-arid regions were tall, hardy, and selected for both fodder and grains. The other characteristics that the farmer breeder had in mind was low risk sensitivity, greater drought tolerance, realization of fodder even if prospects of grain were bleak, preference of livestock etc. In any case fodder was the central concern of a pastoral society which had evolved elaborate social and moral sanctions in this regard. In the developmental strategy of NDCB, not only fodder was neglected but whatever emphasis was given was directed towards the irrigated farmers to encourage them to allocate some area for irrigated fodder crops. Access of the marginal farmer to crop residues, byproducts, dry fodder, etc. was not taken into account. Rather than a few gearing the organizational structure to the requirements of poorer livestock farmers, the diversification plans and support system were designed to take care of surplus irrigated farmers.

(iii) Pricing

When a product is not equally substitutable in the given range of enterprise mix of different classes of farmers, fixation of uniform price could lead to suboptimal allocation of resources. Further, uniform price also leads to cross subsidization. Those who should get subsidy through lower prices by paying higher price bear the burden which really belonged to richer farmers, (e.g. to get services of a veterinary doctor as a part of mobile unit, same price is charged from a landless contributor and a big farmer). It is ignored that a bigger farmer while may not only have better access to other veterinary services but also have more crossbred cattle which require veterinary support far more frequently than the local breed. The total overhead cost of maintaining this establishment is apportioned from the total revenues accruing from the contributions of all poolers whereas the utility of this service will be derived much more by a limited section of the membership. Such distortions create obvious incentives for weaker members not to cooperate.

(iv) Size/Scale/Cooperation

It is recognized that when size increases, not only tolerance for free riders increases but also the need for 'cementing ideology' (Collard, 1978) or an assurance granting mechanism increases (Ones and Foxall, 1982, p.100). In NODB, one notes a significant chasm between the need for investment in building up participative processes and the actual operating mechanisms of complex high technology organizations. In the earlier replication phase, NODB did send spearhead teams to organize cooperatives in different districts; the practice was later stopped. It was reported that NODB was not sure that

state governments would allocate adequate funds to set up dairy plants once the teams had done their spadework. Also, since the cost of mobilization process was being given in the form of grants, NDDB felt that the state accepted the teams not so much because of their commitment to the concept but because of the free nature of service. Later when the Indian Dairy Corporation provided grants and NDDB, the consultancy (almost an alienable feature of grants), the emphasis shifted towards erection of dairy plants rather than mobilization of cooperatives from below.

A stage came when huge capacities were created with very high degree of under-utilization because of lack of investment of time and energy in developing farmers organizations to stimulate supply of milk by small farmers. Logically, idle capacities created pressure on the administrative machinery in the district to increase milk procurement from wherever it was possible at minimum cost and in minimum time. Means of a developmental organization supposed to serve the interest of small farmers became an end. One does not need data to prove who would have lost in the process.

(v) Decision Making Process

Even in some of the cooperative societies of Kaira, we found that the issues which were often discussed pertained to the allowances for travel for secretaries of the society or such other aspects rather than issues concerning cooperation or otherwise of members (e.g. why some members were supplying milk to informal milk vendors in the villages). There was no discussion on factors influencing some farmers not to participate in the process. Likewise, cattlefeed intended to be sold to members was allowed to be sold on commission by some individual farmers or traders (even a non-member). The issue as to whether subsidized input meant for members needed to be provided to everybody was never discussed.

(vi) Credit-Input Linkage - Flexibility in system

In the strategy of NDDB, inputs supply was not linked with supply of credit. In fact, there was a strict stipulation preventing societies to intermediate between borrowers and financial institutions. Regular payment of milk supply was supposed to be sufficient for this purpose. Even though societies in Kaira also informally collect repayment of instalments of loans given by banks and endorse it on back of the pass book, a similar freedom was not granted to the receiving organizations.

There are numerous other features of NDDB strategy as practiced and not as espoused which work against the interest of the rural poor. Since no explicit monitoring of various participative/cooperative processes has been provided for in the NDDB's system of follow-up, one could infer that these aspects did not deserve enough primacy in NDDB's scheme of things. If one does not monitor any particular aspect of implementation, either the presumption could be that the concerned facet of implementation would ensue inevitably or it did not matter if it did not occur. A change not monitored is a change not desired (Gupta, 1981). Neglect of participation of the small farmer and landless in the decision making apparatus of cooperative societies besides the income increase at a higher rate to poor have not been given sufficient importance so far. Monitoring system should explicitly include such parameters.

NDDB does not claim that disparities would be reduced. Logically, therefore, we should not impose our definition of development on the implementation mechanics of NDDB's strategy to condemn it. Lest such an impression is gathered by readers, I must make it very clear that lot of confusion would be sorted out if the proponents of modern cooperative organizations stop claiming that their model could ensure speedy development

of the poor. In fact, as Paul (1983) has recently suggested, "the moral (of successful public programmes like NODB's strategy of Operation Flood) is not that every programme should start with a single service, but that if more complex goals and services are introduced at the outset, structure and processes should be appropriately adapted to the environment and the new strategy" (p.86). Perhaps, in the wake of international concern for development of rural poor (thanks to McNamara!) when aid agencies started emphasising the need for aid to reach rural poor, NODB also transformed its goals a bit. While earlier pronouncements of Amul management did not claim any significant bias towards smaller poor farmer, the latter rhetoric was considerably tilted towards them. A step that was missed was the adaptation of the structure and processes to deal with the ensuing complexity in the organizational design for developing poor in a basically inequitable society without providing for any corrective or sobering mechanism that would avoid dominance of vested interests.

It was assumed that the vertically integrated marketing structure, as the agribusiness concept implies, would lead to a decided advantage for all types of sellers. It was also assumed that allocation of the surpluses accruing through value addition would be spent towards the need-mix of the poor rather than the rich. The fact that organizational design involving participation and cooperation of surplus, subsistence (or even-budget), and deficit household budget farmers in a single administrative set-up had to be fairly complex and adapted to different ecological contexts was somehow lost sight of. It was also not recognized that the complexity involved will call for skills and talents that, because of historical legacy of educational and socio-economic system, would be provided by the better off sections of society.

Further, countervailing strategies to prevent drift of these organizations towards the better people in better and safer regions bypassing the poor of semi-arid regions were not provided for. The neglect of regions having majority of people dependent upon livestock (including premoninantly cattle) in the national programme of dairy development through cooperatives is too serious a lapse to be explained by more implementation gap.

I have made an attempt here to underline the need for reappraising the role of cooperative organizations based on the agri-business model in triggering rural development. I have also described how in some of the traditional models of cooperations, the control over leadership by followers, iteration of roles in a multi-enterprise household economy, greater share of labour as against implements and capital in the value added, delinking of pooling from redistribution and maintainance of a longer time frame for discounting individual returns, lead to a more harmonious self-help social structure. I am not suggesting that various aspects of small scale tribal organizations can be directly applied to large scale modern organizations.

I am only arguing that there is a definite need for reappraising the replication philosophy of cooperative models of development which, by very definition, have an adequate fit with ^{only} a given ecological, social, and market context though there could still be a few lessons that could be replicated. The lesson that could be drawn from Amul's experience ^{perhaps} is that if enterprising leadership, even if belonging to an outside ethnic and socio-economic system, tries to generate popular pressure from below over a long period of time, it is possible to build models of organization that would help counteract the market and be amenable to control by farmers' representatives. ^{Also that} technological interventions must be linked to the socio-ecology of the region.

PART III

THEORY OF COOPERATION : SOME HYPOTHESIS

Basically I will draw on the work of Olson (1973), Sahlin (1974), Runge(1982), Guttman (1982), Galjart (1981), Painquist and Passour (1982), Siebel(1981) and Dnes and Foxal (1982) besides my own (Gupta 1981, 1,b; 1982 a,b) to derive some prepositions which need further exploration.

Olson(1973)

(i) "If there are problems when a jurisdiction is either too small to encompass all of those who benefit from its services or so large that a good proportion of its citizen do not benefit from some collective good it is expected to provide, then there is a case for a separate jurisdiction or government for every collective good with a unique catchment area or domain. There is, in other words, a need for what I have called the principle of fiscal equivalence" (Olson, 1983, p. 171). Olson further argues: "if the jurisdiction is to provide collective good to an optimal degree, it will provide those goods or projects that bring gain that are greater than their costs. But even a project that involves more gain than cost will leave more losers than gainers, if the gain go to a minority of those in the jurisdiction and the cost is covered through jurisdiction wide taxes"(p.171). He further notes that there would not be any incentive for an individual to contribute anything to the attainment of the collective good no matter whether an entrepreneur is involved or not, since the share that an individual might get in a large group or organization would be an infinitesimal share of the gain that might have resulted from his contribution. "Thus either coercion, or some reward that can be given to only to those who contribute to the group effort (i.e., a selective incentive) is needed to satisfy a large or latent group's need for

a collective good. Because the departure from optimality is so large, and the number of people involved is so great the gains that can be made from organizing a large group in need of a collective good are often enormous" ((p. 177). The long quotation and adaptation from Olson's work highlights why agribusiness based large vertically integrated organizations on the one hand tend to be much more authoritarian and on the other hand demonstrate a great tolerance for some free riding. Further negotiation or bargaining among members which is possible only in small size is sacrificed in favour of compromises or coalition with other interests that the entrepreneur will get into to sustain large organizations. Perhaps compromises by NDOB on the cooperative principles against market based aggregative principles illustrates this concept. While the argument of fiscal equivalence is noteworthy and, as we have argued earlier, implies a necessity of taking into account the differential resources base of different classes of farmers, it is also necessary to note that marginal utilities from a common gain would be different for farmers or poolers having different consumption baskets, risk sensitivities, and skill attributes. Uniform price thus may not be the fair price.

However, the next part of Olson's argument tends to justify what Galtung (1974, p. 225) calls 'alpha' structure against more participative, cooperative, decentralized and democratic, 'beta' structures. Vertical integration may not offer the best mechanism of preserving cooperative nature of middle and lower level cooperative small groups. Networking rather than integration might hold the clue.

Some of the features which characterise pooling and redistribution process are described below:

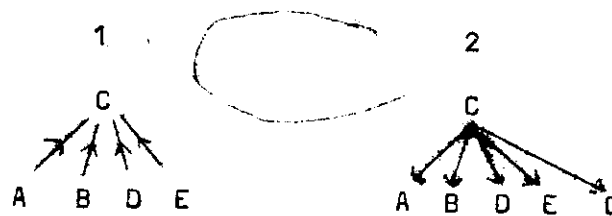
- (a) The incentives or disincentives for pooling resources will vary not only for different classes or kinship/ethnic networks or people but also depend upon various socio-ecological features.
- (b) The perception of risk of joining any group for different individuals will depend upon past experience, individual endowment, future expectation, accumulated insights, previous losses, etc. If Trade-offs under risk vary amongst various classes of farmers and if ability of one class of farmers to negotiate risk depends upon other class, then any pooling framework cannot be conceptualized without taking risk into account.
- (c) The risk adjustment mechanism has evolved historically leading to various traditional forms of pooling, e.g. Irjik (pooling of bullocks in Maharashtra) or Chetu or Beeshu (ROSCAS) or the arrangements for food gathering, honey collection, hunting in tribal societies. They reveal some patterns of delinking pooling from redistribution.
- (d) The historicity of exchange relations has been differently conceptualized by moral economists like Scott and Wolf and political economists like Popkin and Gouldner. The extent to which current and future decisions to pool individual resources are dependent upon past experiences with not only pooling but redistribution amongst poolers as well as others will also be influenced by the rules of the game or social sanctions or customary structures and ability of some members who have not got what they think a fair return to opt out or quit.
- (e) The options of quit or exit need not to be voluntary just the way options for joining a pooling process need not be strictly voluntary. The emergence

of the constraining environment in which voluntary choice of the peasant is compromised by agribusiness or expanding cash crop economy or market control by any particular organization (private, public, or cooperative) therefore suggests that discussion on pooling cannot be restricted only to the benefits and costs of poolers but will invariably have to extend to non-poolers, free-riders, excluded ones, thrown outs, ineligible, etc.

What Brings People together?

The problems of social inequality have been looked at from distributive and relational aspects. "The distributive aspect of social inequality provides only the basis for a proper sociological understanding of how individuals interact with each other in socially significant ways" (Beteille, 1974, p.13). We will instead begin with relational basis of pooling process and try to discover the patterns of redistribution in traditional as well as modern forms. This is important because individual choices/preferences are not made autonomously or independently. "No doubt individuals make choices, but they do not make it random out of all possible alternatives. If they did so, any configuration of the world's society would not be viable, as it would contain an amorphous assortment of action and reaction of people. Society on the contrary exists because it represents a viable pattern of action and reactions of the people, i.e. of the relational matrix. And society changes, while surviving owing to distinctive, and not random changes, in that pattern" (Mukherjee, 1981).

Galjart (1981) has drawn upon work of Polyani (1977, p.43) and Sahlins (1974, p.188) to abstract the following categories of pooling and distribution. While Polyani strongly suggested that certain forms of exchange like reciprocity, redistribution and market exchange corresponded to evolutionary stages of society, Sahlins felt that although direct exchange and pooling could occur in the same social contexts, redistribution was in fact a traditional perhaps enduring form. Galjart objected to this view arguing that all exchange relations could be considered as instances of redistribution. Sahlins defined pooling as: "collection from members of a group, often under one hand, and redivision within this group." The figure summarizes this view:



C = decision centre; A B D E = members of a group; O = other users

1 = contribution; 2 = rewards

Galjart argued that consensus on what is equivalent to what—when different farmers are dealing in different commodities with exchange limited to one or two commodities, there will be a need to agree upon equivalence in commodities. The norms of equivalence will however be not necessarily guided by market prices or real worth. In the interpenetrating credit, product and labour market framework (Bharadwaj, 1979, Gupta, 1981) one cannot value options of a farmer in one market independently of other markets.

A norm of reciprocity will over a period of time call for change in the weights of different inputs such as commitment, loyalty, product (quantity and quality). This is a highly controversial issue in pooling. In marginal semi-arid economies, the small deficit budget farmer would be operating simultaneously in several resource markets and social networks. It is quite possible for cooperation amongst two parties to exist in one resource market accompanied by conflict in another resource market. In caste and status ridden overlaps, such contradictions might become subdued but at intra-caste or ethnic level, these contradictions may become quite apparent. Perhaps then the norms of reciprocity will be guided by the strength and weakness of different groups in resource markets. The vulnerability of a household might influence the value of various inputs apart from other factors.

When in modern organizations, rewards are also reaped in political prices which have different pay-offs to different people it is difficult to ascribe normative weights to the input/output ratios.

Many times dissonance with a primary input leads to consensus around a secondary input for which a small group comes about so as to fix a mutually agreeable price.

Implications are that while pooling multiple inputs, in the collectivities that operate the decision centres may intentionally factionalize or subdivide poolers into small groups so that their ability to question the authority of 'C' is reduced. Batellie (1974, p. 106) probably refers to a similar phenomenon thus: "Marx's analyses of the dynamics of real societies show us that people whose interest appear to be the same are often divided, even as people whose interest appear to be different often come together."

The mutually agreed price may also reflect a collective resolve of a subgroup of poolers to adjust with the adverse input/output ratio. Certain other rewards could then be sought or assumed to be available (at least so the ideology evolves) such as affiliative protection or reward of belongingness or feeling of security which could be assumed to be available only when cover price of other inputs is agreed upon.

Just like bad money drives good money out, it is suggested that in pooling process, when one person starts contributing less other persons may find lesser reasons not to do so with the result everybody or most may start contributing less leading to reduced total output.

In the case of common grazing lands, individual rationality leading to collective irrationality has often been seen to lead to overgrazing. However, overgrazing (caused by reduced concern shown by everybody for ecological balance manifested in time frame) may not affect different groups equally.

In small groups, pooling and redistributive tasks can be mutually monitored by members which is not possible in large groups. The monitoring task is assumed by the decision centre which further becomes powerful and can insulate the distributive mechanism from pooling ones.

The decision centre could expropriate part of the total pooled resources as tax, insurance fund, or savings for investment at the same place or elsewhere. This process is evidenced in cooperative sugar factories where road fund is deducted from the cane price for development of roads. Likewise, development fund is collected for investment in various infrastructural investments. An issue that arises in this connection is whose development is intended through investment of funds so generated by decision centres? In a district

of Maharashtra which has the highest number of sugar factories in any one district in the country, half of the district is facing currently crisis of drinking water while in the remaining half the sugarcane economy is flourishing. The development fund was used more for the better off farmers and regions. The disparities were increasing.

Redistribution in traditional, cooperative organizations could have range of characteristics, some of which are quite pertinent for modern organizations even today and some being exploitative need to be done away within modern organizations if they exist there. The extent to which rewards are allocated to those who pooled equally, partially, or only sparingly as against those who did not pool at all determines the power domain of the decision centre.

Also, whether the quantity of output which is necessary for the viability of the group can be collected at minimum cost from fewest poolers will determine the extent to which the decision centre needs to supervise the pooling-distribution process.

Recently Dnes and Foxall (1982) in a discussion on altruism and cooperative viability extended the implications of assuming individuals to be profit maximizing in nature, motivated out of self-interest. They also noted that because of multiple roles (or what ^{Prof. Matthai} \angle calls bundle of roles) of an individual as consumer or producer, the actions taken to maximize return in one role of an individual may conflict with actions taken to maximize returns in another role. This situation becomes further complicated when we take into account the fact that different enterprise mix evolve for various households in a historical fashion in a give ecological system requiring use of different discount rates for investments in the same enterprise by different classes of farmers. They also use different time frame in which to discount the

returns. The assumption of production function approach to work out individual costs and benefit seldom provide an explanation for absence or otherwise of cooperation in any economic activity.

Dnes and Foxall (1982) further suggest that members of Cooperatives rely upon altruism of other members, "any of whom may choose to increase his net income by some form of 'disloyalty' to his cooperative which the average incomes attributable to cooperative members as a whole" (p.99) Because the trust of mutual monitoring amongst members can be assured only in a small group, the problems of selfishness of few against selflessness of many raises the question of tolerance of free riding and acceptance of a premise that members try to maximize the average income of the cooperative rather than individual incomes. This inference is used to explain why cooperatives succeed in some regions and fail in others.

Our contention is that ability of members of a voluntary organization to contend with maximization of average collective gains involves making one basic assumption. It is the presence of some minimum level of base income at which most members have been operating. Dnes and Foxall add: "in the case of group of farmers which are less homogeneous than the model assumes, a decision on maximum permissible cooperative size would be taken by a majority of members who could be willing to tolerate a free rider situation. In addition, historical, administrative and financial factors results in a situation in which cooperatives of a size which fail to maximise average to their members nonetheless exist. Tolerance of free riding is manifest in the lack of members loyalty/discipline and the attempts to restrict cooperative membership to which altruism has been made." Firstly, the contention that in less homogeneous

social system, the decision to tolerate free riding would be taken by majority of members who would determine the maximum size is not acceptable. The fact that the authors have used descriptive reality (existence of cooperatives which fail to maximise average return to members) to suggest a prescriptive norms has serious implications. Neither the decision making system in modern large cooperatives involves majority of members when issues of free riding arise nor it can possible happen because the free riders themselves may dominate the executive committees of cooperatives.

Sahlins quotes Gouldner (1974, p. 208) to suggest that "it is scarcity and not sufficiency that makes people generous, since everybody is thereby ensured against hunger!"

We have tried to present in this paper a rationale for the inherent mis-match between modern cooperative theory and praxis with the need mix of deficit budget farmers particularly of semi-arid regions where majority of marginal farmer and landless labour have chronic deficit in the household budgets (Gupta 1981). However, the traditional forms of cooperation still survive only in such regions.

Why is that modern cooperatives do not reach the places where traditional cooperation exists?

Runge (1982, p. 1986), while replying to critique by Guttman and others on the issue of common property externality, argues that much of the theoretical bias in favour of resolution of the prisoner's dilemma through a matching behaviour over a long time frame is misplaced. His contention is that wherever incentives to free ride are high, information imperfection are predominant, need for assurance mechanism through institution cannot be

side stepped in practice nor should be so treated in theory. In other words, cooperative institutions can not expect as Boulding assumes that benevolence will win over malevolence in the long term (the faith in the dawn of Rama Rajya some time in future), they have to become partisan and not neutral.

Cooperatives that will involve cooperation of haves and have-nots will require a very strong state support to enforce discipline on those who enter cooperatives because of their superior entrepreneurial qualities and progressively create conditions for exit or indifference of the poorer members. Such organizations are not easy to come about particularly when massive aid from international agencies is used to propagate a myth of neutral organization with apparently equitable norms leading to rural development.

The minimum that social scientists concerned with development of rural poor can do is to articulate the logical inconsistency between espoused theory and theory in use. It will be naive to assume that designers of modern organizations are unaware of many of the contradictions raised here. Why do we then find a near absence of an alternative model of cooperatives that leads to reduction in inequalities and increased proportion of benefits to poorer member? My submission is, let us not try to answer the question. A more worthwhile effort will be to first persuade others convinced about the fact that some people (the poorer one) will always remain out, that ~~the~~ ^{raised by us} question has a place in discussion on cooperatives.

BIBLIOGRAPHY

1. Aurora, Daljeet, Chairman & Managing Director, HHEC, New Delhi, formerly with APDC - Personal Communication.
2. Baviskar B.S. (1980) *The Politics of Development: Sugar Cooperatives in Rural Maharashtra*: Oxford Unit Press, Delhi.
3. - 1983 Milk Cooperatives and Rural Development in Gujarat: A Case Study; Paper presented to workshop on Cooperatives and Rural Development in India, March 4-5, 1983, New Delhi.
4. Bennet, John W. 1978 *Agriculture Cooperation in the Development Process: Perspectives from Social Science*, included in "Cooperatives, Small Farmers & Rural Development", ed. M.J. Mograth University Centre of Cooperation and another untitled mimeographed study 1978.
5. Beteille Andre (1974), *Six Essays in Cooperative Sociology*; Oxford University Press, Delhi (ed) 1969 *Social Inequalities*, Penguin.
6. Bharedwaj, Krishna 1979; *Macro Economic Framework of India* : *Journal of Manchester School*.
7. Boulding, Kenneth, 1978; *Ecodynamics: A New Theory of Social Evolution*, Beverly Hills Sage Publications.
- *8. Collard D., (1978) *Altruism and Economy*, Oxford: Martin Robertson
9. Diefer, Eberhard (1974); *Operational Efficiency of Agricultural Cooperatives in Developing Countries*. Food and Agricultural Organization of United Nations.
10. Dnes A.W. and G.R. Foxall (1982), *Altruism and Cooperative Viability*; Oxford Agrarian Studies Vol. X p. 98-106.
11. Feder, Earnest 1976; *Agribusiness in Underdeveloped Agriculture*, EPW (July 1979)
12. Galjart, Blno (1982); *Participatory Development Projects: Some Research Conclusions*, Unpublished Paper, Univ. of Leiden, Netherlands
13. (1981) *Cooperation as Pooling*; Paper presented to the Symposium on Traditional Cooperation and Social Organization in relation to Modern Cooperative Organization and Enterprise, Amsterdam.

14. Galtung, Johan, et al (ed.) 1980; Self-Reliance; A Strategy for Development, London; Bogle - L'Ouverture Publications Ltd.
15. George, Shanthi (1983): Cooperatives and Indian Dairy Policy: More Anand than Pattern, Paper presented to Workshop on Cooperatives and Rural Development in India, Delhi
- *16. Gouldner, Alvin (1960); The Norm of Reciprocity: A Preliminary Statement; American Sociological Review 25:161-168; quoted in Sahlins (1974)
17. Guhan 1980; Rural Poverty: Policy and Play Acting; Economic and Political Weekly, Vol XV No. 47.
18. Gupta, Anil K. (1981); A Note on Internal Resource Management in Arid Regions, Small Farmers Credit Constraints: A Paradigm - Agricultural Systems (UK) Vol 7 No.2 pp. 157-161.
19. -(1981) Social Effects of Rural Projects monitoring through people's Participation; International Review of Administrative Sciences, No.3.
20. -(1981) Viable Projects for Unviable farmers: An Action Research Enquiry into the structure and processes of rural poverty in arid regions; Mimec:
21. - Farmers' Response to Cooperative Project Implementation : Cases in Dairy and Sheep, Pasture Development in Arid Regions - Paper presented at IUAES Symposium on "Traditional Cooperation and Modern Cooperative Enterprises" - April 23-24, 1981 at Amsterdam.
22. - (1982), Designing Developmental Organisations: Search for an Indian Theory; IIM Working Paper No. 444, P.31. Included in International Congress of Administrative Sciences, Berlin, 1983 (Sept.)
23. Gupta & Khanna (1983) Emergence of an Organizational Design; History of a District Level Dairy Organization- A Note prepared for Organizational Dynamics and Design Course for PGP students, IIM, Ahmedabad.
24. Gupta, R.K. (1979); Essay in Economic Anthropology, Calcutta: Institute of Social Research and Applied Anthropology.
25. Guttman, Joel M (1982); Common Property Externalities: Isolation Assurance and Resource Depletion in a Traditional Grazing Context: Comment - American Journal of Agricultural Economics,

26. Harvey Charles, Jacob Jake, Lamb Gooff and Schaffer Bernard; (1979) Rural Employment and Administration in the Shind World, ILO & Saxon House, England, P. 111.
- *27. Homans, George C (1950); The Human Group - New York, Harcourt, Brace
28. Hyden G (1978); Problems of Reaching the Poor: Implication for Cooperatives-Paper presented at COPAC Symposium on Cooperatives against Rural Poverty, Rome, quoted in Verhagan 1980.
29. McGarh, Mary Jean (1978); Cooperatives, Small Farmers and Rural Development University; Centre for Cooperatives, University of Wisconsin Extension, Madison.
30. Mukherji, Ramakrishna, (1981) Realities of Agrarian Relations in India; Economic and Political Weekly, Vol XVI No.4 pp.109-16.
31. National Dairy Development Board, 1980-81, Annual Report, Anand.
32. Olson, M. (1973); The Logic of Collective Action: Cambridge; Harvard Unit Press.
33. Palmquist, Raymond B and Pasour E,G. Jr. 1982; Common Property Externalities: Isolation Assurance and Resource Depletion in a Traditional Grazing Context: Comment, American Journal of Agricultural Economics, Nov. 783-784.
34. Paul Samuel (1983) The Strategic Management of Development Programmes: Evidence from an International Study, IARS(I) Belgium pp. 73-86.
- *35. Polyani (1977); The Livelihood of Man, New York, Academic Press.
36. Runge, Carlil Fond, "Common Property Externalities: Isolation, Assurance and Resource Depletion in a Traditional Grazing Control, American Journal of Agricultural Economics 63 (1981 a) 595-606.
37. - "Institutions and Common Property Externalities: The Assurance Problem in Economic Development"; Ph.D. Thesis, University of Wisconsin 1981 - "Institutional Rules and the Free Rider" Paper presented at the meetings of the Public Choice society, 5-7, March 1982 and comments in AJAE, 1982; Pp. 785-788.
38. Sahlins, M.1972, Stone Age Economics Great Britan: Tavistock Publications.

39. Sambrani, S. (1982) Management of Commodity Systems: The Development of Cooperative Dairying in India; Agricultural Administration II, Great Britain Pp. 259-271.
40. Seetharaman, S.P. and Mohanan N.(1982); Organization Building in Cooperatives - A Framework; Review of International Cooperatives, Vol.75, No.2.
41. Seibel, Hans D. and Damachi, Ukondi G: 1981; Self-Help Organizations: Guidelines and Case Studies for Development Planners and Field Workers - A Participatory Approach (Mimeographed)
42. Ullrich Gabricle (ed) 1980: Evaluation of Cooperative Organizations; Report of International Conference; Berlin (West).
43. Verghagen K (1980); Summary of Main Features of Field Research Rhailand and Sri Lanka"; Working Document No. 14 (Draft) ICA/RAI/NCC/CLT Research Project Development of Cooperation for Small Farmers.

Notes: I must mention that none of the colleagues acknowledge earlier have seen this draft and are absolved from any responsibility for the views expressed here. Short term research resource provision by CMA is gratefully acknowledged. Ruthless comments are invited. (Anil K Gupta)

** Original not seen