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Collective Decision and People's Participation at Gram Panchayatlevel in West Bengal

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Introduction

The decentralized planning with people's participation leads to the devolution of decision making power, delimiting the authoritarian role of the state power over the individuals. The individual in the society bears a personal as well as collective identity. When they participate in the plan, either at the stage of formulation and / or at the stage of implementation, and / or at the stage of transmitting information to the next higher unit, which represents the large collectivity, say the state, their roles are guided by personal interests and sometimes by collective ones. The stronger cohesive the social system (may be identified in terms of ethnic or political or economic structure etc.) the greater is the possibility of individuals' choices, preferences or goals to conform with the collective choice and collective goal. The reconcilliation of individuals' choices into the collective choice is the crux of the problems of decentralized planning with people's participation, which is least theoretically explored. The efficiency and successfulness of this sort of plan mechanism, however, depends upon the degree of participation of the people belonging to the target group and truthfulness of their information transmitted to the central unit of planning. The proper representability of the local demands is the crucial condition for the success of decentralized planning. The iterative exchange of information between central planning authority and local unit has got the top priority also in the literature on multi-level planning (Karnai, 1967 ; Weitzman, 1970 ; Geoffrion & Hogan, 1972 ; Heal, 1973).

From experience of decentralized planning in West Bengal a new concept (or rule which is mostly political) of collective decisiion making has evolved, where various societal forces have been linked up with the state power, thereby muturally reinforcing and mutually inproving the conditions for a successful plan mechanism. The section 1 of the present paper intends to formalize the decision making procedure at the grass root Gram Panchayat level, particularly at the stage of plan formulation. This formal analysis purports to show how the information regarding individual's choices derived from her perception about some social schemes of Gram Panchayat may be transmitted into the plan dialogue through the members of Gram committee and Gram Panchayat. As a pathological case to this analysis in section 2 an attempt to derive the collective choice on the basis of the majority decision rule based upon some empirical observations in two Gram Panchayts has been made. The whole analysis contained in the paper is based upon

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the basic proposition that individual's value or ethical judgement on the social states which is the manifestation of her psycho organism is formed by her involvment and interaction with the social organization. In this sense all individuals in the society are considered socially embodied. In section 3 political, economic and caste/religion categorywise participation in the village meeting of individual and her awareness in terms of properly identifying Gram Panchayat Members of her village mouja have been taken into consideration.

1. **Formalization of the decision making process at and below the Gram Panchayat (GP) level.**

The present formalization is made at two stages : Stage I suggests how to derive an idea of the collective choice of the village people from their perception and approval ranking (which is heuristically defined) on an on-going social scheme of the GP. Stage II formalizes the decision making procedure in the annual plan meeting on the basis of the collective choice of the people represented by the concerned member of the GP and members of Gram Committee (GC). Since every formalization involves the construction of a structure under certain specification given in the form of definition and assumptions the present formalization also contains the following assumptions and definitions.

Stage I Formalization

During the period under study a specific social scheme, which is on- going at the GP and which is to be continued further (or to be pursued for implementation) is described by two sets of characteristics including :

the general distribution of benefit, i.e. B

the modus operandi of the scheme, i.e. M which includes four factors, viz.

(i) caste specific distribution of benefit,

(ii) political affiliation specific distribution of benefit.

(iii) efficiency in utilization of fund, i.e. Yu/y and $O < Yu / y \leq 1$,

where, Yu : fund actually used in the execution of the scheme,

y : fund allotted for the execution of the scheme.

(iv) timeliness in completion of the scheme, i.e. T_a/T_p , where, T_a : actual gestation period, T_p : planned gestation period.

D.1. Any set of position for these two parameters (i.e., b^x, m^x) defines a social state which is denoted by x. x. ε. x, the set of all possible social states.

At the level of formulating the plan, in the annual plan meeting of GP, when the concerned member goes to represent the demand of the people of her/his constituency, she/he must have some a-prior knowledge about the households'

choices or preferences, i.e. the ranking between alternative possible social states. Only the perception about the present social state (say x'_1) of a particular scheme is observable, not the other conceivable alternatives. When a household[1] disapproves the present state of the social scheme as they perceive, this implies that they have conceived an idea of a better alternative in their mind. Actually on the basis of that information, that lies beforehand, the members of GP and the member of GC can derive an idea of the choice of the people among alternative possible states with reference to the present perceived state.

Now given the budget or resource constraint imposed by the next higher authority i.e. pradhan and GP given her / his political guidelines[12], on the basis of these choices, the member of the GP has to set her / his activity for her / his constituency. In order to derive this idea we require to make the following assumption :

A. 1. The individual, while making her / his choice among the alternative possibilities of a social good or social action, is not directly sensitive to the real existence of that good or action itself, but to the image she/he has of it.

We are therefore primarily concerned with the present perceived social states x'_1.

D.2. The present perceived social state x'_1 is defined jointly by the perceived benefit $b^{x'}1$ and perceived modus operandi $m^{x'}1$.

Now there is a plausible case of evaluating x'_1 in the form of attaching a scalar value to each of the possible x'_1 which will represent the present social scheme. Regarding the perceived distribution of benefit $b^{x'}1$ and perceived modus operandi $m^{x'}1$ one can think of a number of plausible values. As a pathological case to this, let us consider two possible responses, regarding $b^{x'}1$; whether the household thinks that the benefit has reached the household or not. If the answer is affirmative then $b^{x'}1 = \beta$, and $b^{x'}1 = 0$, if it is negative. Regarding $m^{x'}1$, we consider two possible values again ; first c, if the household has a specific complaint regarding any of the four factors, concerned, and if not, then n. On the basis of these values we will define a scalar valued function, A^h for each of the hth household which will be called as the approval function.

D.3. The approval function A^h for each of the hth household in the society is defined as :

$$A^h = \alpha (x'_1)$$

If

$x'_1 = (\beta,n)$ then $\alpha (x'_1) = 1$ (say), i.e. 'Full approval'

$x'_1 = (\beta,c)$ then $\alpha (x'_1) = 2$ (say), i.e. 'Partial approval'

$x'_1 = (O,n)$ then $\alpha (x'_1) = 3$ (say), i.e. 'Indifferent / uncertain'

and $x'_1 = (O,c)$ then $\alpha (x'_1) = 4$ (say), i.e. 'Complete non-approval'

Following this definition, the present state of any of the scheme is said to be 'not approved at all' if the household disapproves both the present distribution of benefit and the modus operandi of its excution, i.e. it desired for the change in both distribution of benefit its modus operandi. By definition scheme is said to be 'approved partially' when the household admits the present state of benefit, but thinks that it could have greater benefit if the modus operandi could be changed. This is said to be a matter of 'indifference' or uncertainty' if the household has neither admitted the present state of benefit from the scheme, nor it has any complaint.

Using D.3 we can now derive the preference relation P_h and P^*_h for the hth household and hε H, H being the total number of households.

$$(\beta,n)\ P_h\ (\beta.C) \leftrightarrow O\ P^*_h\ 1.\ \text{and so on}$$

It automatically follows that

$$P^*_h \subset A \times A \text{ when } P_h \subset x'_1 \times x'_1$$

D.4. For H number of households we can now define the approval set A for the present social scheme X_1 and thus

$$A = (A^1, A^2 \ldots A^H.)$$

Each of A^h can assume any of the four values 1,2,3 and 4. For an on-going social scheme, which value of A^h will get priority to the concerned member of GP and the members of GC in their choice between alternative strategies is decided by themselves, being guided by some political or other social consideration or some plan-targets, conforming to the planning at national level.

Stage - II Formalization

Now on the basis of defining the approval set A we may define a relation G such that

D.5 $$A^* GA \rightarrow G \subset A^* \times A$$

$$A^* = G\ (A^1, \ldots\ldots, A^H).$$

If the member of GP is concerned with mojority decision, for example, then A^* is the greatest repeated value of A^h. In this case if $A^* = 1$, this will imply that majority of the people approve the present social state. If $A^* = 2$, otherwise, this implies that the majority are not satisfied with the existing mode of implementation and want an alternative social state.

Now for an on-going social scheme in the GP the member of the GP has to decide whether she / he will continue with the present social state (say x_1) or not, i.e. she / he has to choose between x_1 and other possible alternatives (say x j's). Her / his choice set therefore must contain a fixed element x_1 so that the definition of the

choice function puts some domain restricions. Let x be the power set of x, i.e. set of all subsets of x and S_1 be the set of all subsets of the power set S which includes x_1. Let R be an ordered relation defined on S_1^g. Now the member of the GP's choice function C_g defined by :

D.6. $C^g(S_1, R)$ is a mapping $S_1 \xrightarrow{C^g} S$ such that for all elements of

$$S_1 \in S,\ C^g(S_1, R) \subseteq S.$$

When the member of GP has to decide whether or not x_1 to let to be continued, i.e. ranks (R) between x_1 and xi, $i \neq 1$ in her choice, R is influenced by the peoples' approval ranking A to x_1 and particularly by A^*. Thus again we can assume a relation Γ between R and A^*, i.e.

$$R \Gamma A^* \rightarrow \Gamma C\ R \times A^*, \text{ i.e. } \Gamma \in \{(x_1, x_1)\ A^*, (x_1, x_2)\ A^* \ldots\}$$

Now in our defined structure if x^g is the chosen social state (where $x^g \in S_1$) of the member of GP, the fulfilment of x^g however will depend upon the resource constraint y^g. Thus the member has to face the production possibility frointier :

$$Q^g(x^g, y^g) \leq 0$$

But all fessible points withis $Q^g(x^g, y^g)$ are not the matter of consideration for the planning, only the decisive ones. We can think of a mechanism θ^g which maps from the production possibility set into the decisive set $\theta^g(x^g, y^g)$ such that it doesn't supersede the choice set C^g in which the ranking between alternatives $x_i \in s_1$ is made on the basis of A^*. In other words,

$$Q^g(x^g, y^g) \rightarrow \theta^g(x^g, y^g)$$

such that

$$0^g(x^g, y^g) \leq C^g(S_1, R)$$

and

$$R \Gamma A^*$$

In the annual plan meeting in the GP when the member of GP as the representative of her / village constituency places the demand of the people regarding a scheme, she / he as a matter of fact presents $C^g(S_1, R)$ before GP. In rural West Bengal, at present as we stated, above, we can trace out at the GP level two variant models of decision makaing.

Variant - 1. The pradhan with the help of permanent staffs like job assistants, secretary exofficio members, political personnels etc, with some tentative initial ideas about the production possibility frontier with $y^g = y^g$ sets the plausible decisive set θ. In that case, in due course of interaction in GP meeting, member of GP tries to minimize the difference between c^g and θ

$$\text{i.e., minimize } (C^g (S_1.R) - \bar{\theta}) (x^g, y^g)$$

Variant - II The member of G.P. places the decisive set $\theta^g (x^g, y^g)$ $c^g (S_1.R)$.

In that case, in the due course of interaction between the members of GP, given the resource constraiant, G.P. aims to attend the maximum possible value of θ^g, i.e.

$$\text{maximize } \theta^g (x^g, y^g)$$

The planning is however concerned with the nondominated vectors satisfying the following condition.

$z (y) = \min \{C^g (S_1,R) - \bar{\theta}(x^g, y^g)\}$ in the case of the variant - I

and

$z (y) = \max \theta^g (x^g, y^g)\}$ in the case of the variant - II

2. *An empirical analysis for deriving collective choice.*

The empirical analysis presented here is based upon primary data personally collected using stratified random sampling method from two Gram Panchayats (GPs), viz Badanganj - Fului - I in block Goghat - II (considered as GP - I) in the district of Hooghly and Kashmoli in block Amta - II in district of Howrah constituting 5 and 7 respectively 12 village Moujas. The study unit being considered is individual household. Both these two GPs located at the long distance from urban foci and hence owing to an unmixed rural character.

In order to conceive an idea of collective choice of the people from heuristically defined approval ranking, the design of analysis directly follows from the stage-I formalization as presented in the subsection I. We have just calculated the number of sample households approved fully, partly, not at all, or being indifferent to the present state of 5 different selected schemes, viz. Tubewell sinking resinking, Road construction & maintenance, Literacy campaign, Canal excavation and Electrification in GP–II, In GP–I as the last two schemes have not been implemented in a large scale we have taken into consideration only first 3 schemes. In this

regard as per difinition given in section I, a scheme is said to be 'approved fully' when it is done and the individual member of the household (mostly the head of the family) asked in particular, thinks that they have got the full benefit without any objection raised on any specific gound. He is said to approve this partly, if it appears to him that he could have greater benefit if there was no fault at the level of execution. In other words, 'partial approval' implies that the individual in particular has expressed her dissatisfaction either regarding the timeliness in completion of the scheme and / or regarding the way of utilization of fund and /or castewise discrimination and / or political discrimination. The complete non-approval includes the cases where the scheme appears not to be implemented at all or if it is, then the individual thinks that he is absolutely deprived of the benefit from it. Finally he is said to be 'indifferent' if he has no benefit from the scheme and also that he has no complaint against the mode of execution of the schems.

Using both versions of the majority decision rule (i.e. weak and strong) A* (D. 5), the greatest repeated value of A^h, the household's approval ranking to the present perceived state of some specific schemes of the GP, has been identified (Table 1). In the cases where approval ranking takes 3 distinct values ('full', 'part' and 'non-approval') the Condorcet's rule[3] of 3 has been applied. Table 1 shows that for G. P.–I, Badanganj Fului–I GP all the schemes of GP taken into consideration have got the majority approval of the sample households. On the other hand, in GP–II, i.e. Kashmoli GP sample households fully approved the tubewell sinking scheme, partly approved road construction and didn't approve the way of execution of the literacy campaign, canal excavation and electrification scheme at all. Now in order to represent this A* in the collective decision making of the GP, there must exist a correspondence mechanism (r' as defined in section I) that makes a relation between the ranking of the member of GP over alternative social states (defined in terms of unchanged and other changed modes of implementation for an on-going social scheme) and A*. One of such possible correspondences may be provided by participation in the village meeting.

3. Individual's Participation in the Village Meeting and Political Awareness.

In the decentralized planning under Panchayati Raj Institution as construed in rural West bengal, at the grass root level, the concerned member of the Gram Panchayat (GPM) at the stage of designing the social project along with the members of Gram Sabha (GS) occasionally meets the villagers of her constituency. In the village meeting a lot of actions and reactions take place between GPM and villagers and common people participate at this stage of planning in the sense of feeding information regarding their choices and preferences over the alternative social schemes (defined here in terms of alternative modes of implementation). The GPM, on the other hand, plays the role of madiator sending the plan messages

like objectives, motivations of the planner. Whether the approval or non-approval of the household as shown in the table 1 in section 2 of the empirical analysis will be reflected in the collective decision making depends upon whether the individual household in question participates and expresses its opinion or not. Participation is therefore, an essential form of exchange between an individual and her surrounding collectivity. An individual's probability of participation and her power of expressing herself therein depends upon the attitude of others in the society which is thereby determined by individuals's position in the socioeconomic and political structure. Her willingness to participate in the village meeting also depends upon her political awareness. Here in Tables 2 & 3 political economic, caste/ religion categorywise participation in the village meeting of individual and her awareness in terms of properly identifying the GP members of her village constituency in two Gram Panchayats, i.e. Badanganj–Fului–I and Kashmoli have been presented. So far the political categorization is considered we have two categories :

(i) Those having the political affiliation with ruling party, (considering which party most of the members of the household support and cast vote in favoure of)

(ii) Rest (including those affiliated with the non-ruling party and those not willing to express their party affiliation).

Regarding caste and religion based categorization in GP–I only two categories have been considered :

S_1 : SC/ST

S_2 : Others (including Muslim & other Hindu. Muslim is not so important here).

Whereas for GP–II Muslim community being an important factor three caste divisions are taken into consideration.

S_1' : SC

S_2' : Muslim

S_3' : Others

So far the economic categorization is concerned, it is done on the basis of individual's relation with the means of production and her position in the labour market. The categorization is slightly different for GP–I from that of GP–II. For GP–I we have

E_1 : those being cultivators with < 1 bigha (= 0.4 acre) of land with no ownership of shallow tubewell (STW) and /'Hal' (a pair of bullocks) and also those landless agriculatural and casual non-agricultural labour.

E_2 : those being cultivators with 1 bigha–6 bighas (0.4 acre – 2.4 acres) with no STW owned and those with the nonagricultural occupation having household industry with family labour and those working (not casually) as an unskilled labour in the factory

E_3 : those with pure agricultural occupation > 6 bighas (2.4 acre), STW and Hal and for pure nonagricultural occupation with household industries, separate premises, making transactions outside the village and those engaged as the skilled worker permanently.

For GP–II We have considered only two catetories :

E_1' : E_1 & E_2 are put together

E_2' : E_3

The reason for doing this lies into the fact that in this GP HYV seeds and modern technology have not been introduced in a large scale compared to that in GP–I and hence the economic differences between the marginal holding (belonging to E_2) and landless (belonging to E_1) is not so significant. Tables 2 and 3 show caste / religion political affiliation and economic categorywise participation in the village meeting (considering whether any members of the household attended any such meeting in the last two years). The tables show also the political awareness in terms of whether the members of the household can identify all or at least one (i.e., 'partly aware') of the GP members in her village constituency. Summarizing the results from Tables 2 & 3, Table 4 shows the main high-lights :

Table 2 Political Economic & Caste / Religion Categorywise Participation in Village Meeting with the members of GP and Awareness in terms of Properly Identifying the GP members by the Sample Households in GP–I (Number)

Political	Economic	Caste	Participation		Awareness		
			Yes	No	Aware	Partly aware	Not aware
		SC & ST	11	11	11	9	2
	E_1	others (incl. Muslim & General Caste)	0	3	1	2	
Affiliated		SC & ST	3	8	7	2	2
with Rural	E_2	others (incl. Muslim	7	7	12	1	1
Party		& General Caste)					
		SC & ST	0	0	0	0	0
	E_3	others (incl. Muslim & General Caste)	9	6	11	4	0
		SC & ST	0	1	2	2	0
	E_1	others (incl. Muslim & General Caste)	0	2	0	2	0
		SC & ST	0	0	0	0	0
Rest	E_2	others (incl. Muslim & General Caste)	4	1	4	1	0
		SC & ST	0	1	0	1	0
	E_3	others (incl. Muslim & General Caste)	4	11	10	5	0
		Total	38	54	58	29	5

Note : 1. Economic categorization : E_1, E_2, E_3.

Table 3 Political Economic & Caste / Religion Categorywise Participation in Village Meeting with the members of GP and Awareness in terms of Properly Identifying the GP members by the Sample Households in GP–II (Number)

	Caste	Economic	Participation		Awareness		
			Yes	No	Aware	Partly aware	Not aware
	SC	E_1'	6	4	6	5	0
Political		E_2'	7	2	7	1	0
Affiliated	Muslim	E_1'	3	1	1	2	0
with the		E_2'	3	4	6	2	0
rulling Party	General	E_1'	2	2	1	2	1
		E_2'	2	5	4	2	0
	SC	E_1'	1	5	4	2	0
		E_2'	4	9	9	4	0
Rest	Muslim	E_1'	0	7	8	0	0
		E_2'	4	7	10	0	
	General	E_1'	0	6	1	4	1
		E_2'	2	3	1	5	0
		Total	38	54	58	29	5

Note : 1.

E_1' : E_1 and E_2 are put together

E_2' : E_3 'See Table 2'.

Table 4 Participation rate in the meeting with the members of G.P. by different categories of people (Sample households)

Gram Panchayat – Fului – I (Hooghly)

Participation Rate (as a whole)	Participation Rate among SC & ST	Participation Rate among the economically poorest section of the people	Proportion of the participants affiliated with the ruling party
41%	37%	35%	79%

Gram Panchayat – Kashmoli (Howrah)

Participation Rate (as a whole)	Participation Rate among SC & ST	Participation Rate among the economically poorest section of the people	Proportion of the participants affiliated with the ruling party
38%	47%	32%	68%

In the social schemes implemented by GP usually target group is chosen from backward caste community and economically poorest section of the people. Table 4 shows that the participation rate among SC/ST and that among economically poorest section are very low. The participation rate, on the other hand, among those who are politically affiliated with the ruling party is maximum. The political awareness in terms of identifying the GP member is also maximum among those who are politically affiliated with the ruling party. The reason for low participation rate among the economically poorest poeple as shown by themselves is that they have to make themselves engaged all the time in earning their breads and hence it becomes difficult for them to spare time for participation in the village meeting. Hence the poorest person has to face an opportunity cost of attending the village meeting. All these factors build up the participation constraints before them. Given these contraints one cannot expect that the perception of the people about mode of implementation of social scheme so far studied in section 2 and the approval ranking thereby derived can be reflected in the collective decision making the GP level.

Hence there will exist the information gap between the common people and representative of plan authority. For a successful planning the informational gap

has to be minimized. And for minimizing the gap we must have to identify the root of this gap thereby suggesting some incentive scheme for participation.

Conclusion :

This paper suggests a model to feed information about people's choices regarding the social scheme of the Gram Panchayat and transmitting in the plan dialogue, in the existing set-up of decentralized planning of West Bengal at its grass root level. An empirical exercise is also made here on the basis of the sample observations in two Gram Panchayats to derive the approval ranking which is part and parcel of deriving the collective choice of the people. The susceptibility of this type of plan model however depends upon the people's participation in the village meeting with the members of Gram Panchayat and Gram Subha. In this decentralized planning people have been provided with a large scope to represent their choices in the planning by participating in the village meeting. The empirical observations indicate some formidable constraints on the peoples' participation, being laid into the existing socio–economic and political structure of the society. Among all the factors, however, the empirical analysis shows the most influential role being played by people's political affiliation to determine participation and non-participation in the village meeting.

Notes

1. The household, not the individual in our present analysis is considered the study unit. This selection is guided by the fact that basically here we consider some social schemes under decentralized planning, whose consumption is collective in nature, and at the village level, a household is the lowest unit of collective consumption.

2. Sometimes the members' activity is constrained by the specification of target, group, e.g. for tubewell sinking the fund may be allotted strictly for the backword caste community.

3. Condorect's rule is used in the cases where there is the possibility of more than two alternative social outcomes and then there is a possibility of cyclical preference. If there exists 3 alternative possibilities, say a, b and c and a defeats b by m_1 votes, b defeats c by m_2 votes, c defeats a by m_3 votes and $m_1 > m_2 > m_3$ then according to Condorect's rule a will be winner.

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GRAM SANSAD AND GRAM SABHA : A STUDY IN WEST BENGAL

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"A democracy working for social ends has to have itself on the willing assent of the people and not the coercive power of the state .... The ignorance and apathy of large numbers have to be overcome. A clear understanding of the conditions and the problems and of the appropriate remedies has to be carried to the people at all levels. Their own views about their needs and difficulties and the correct solutions must be elicited and given the fullest weight in making the plans, in the execution of which they will be called upon to assist....." This was the saying the very First Five Year Plan (1951-56) of our country. By concept, poeple's participation means not only enlistment of the support of the masses but also their active involvement in the different stages of formulation and implementation of plans and programmes. In participation then exists direct interaction between those who deliver the services (whatever be the form and content) and those who are the recipient of those services. If this interaction is going on spontaneously and continuously, the development process yields desired results. The Ashok Mehta Committee observed that "the psychic dividends of the asociation of the rural people with the planning and development process are the crux of the matter". For achieving the end this Committee recommended the strengthening of the Gram Sabha (a body composed of the local people). The committee very emphatically put forth the advantages of Gram Sabhas :

"the grama sabha has an important role in activating the democratic porocess at the grass roots level, in inclucating community spirit, in increasing political awareness, in strengthening developmental orientations, in educating the rural people in administrative and political processes and in enabling the weaker sections to progressively assert their point of view."

The Committee to Review the Existing Administrative Arrengements for Rural Development (1985) also placed a great thrust on the Gram Sabha. This Committee recommended that "there should be a Gram Sabha for each village consisting of all the voters of village". The report of Working Group on District Planning (1984) commented (to quote), "although the proposition that development requires popular participation is well understood, it should be noted that popular participation is still an undefined normative concept". This is the state of affairs after thirty three years of the First Five Year Plan. Lots of experiments have been made in our country for evolving popular participation in all walks of development. The culmination of all such efforts is the adoption of the Seventy Third and Seventy Fourth Amendments to the Constitution (1992). By virtue of these amendments, panchayats in rural areas and nagarpalikas in the urban areas have

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been given constitutional status. Both these institutions are people's institutions and are expected to realise the needs and ambitions of the local people.

From psychological and ethical viewpoint, the people's participation is the crying need for making success in development activities. Psychologically, participation augments the existing strength and creates a sense of belongingness. Ethically, it can be reiterated that as funds spent for development works come from the people (through taxes they paid, savings they made), they should have every right to oversee how the funds are being utilised. In fact, this is the policy of the Government of West Bengal also. The present Left Front Government made the moribund panchayati raj institutions (PRIs) vibrant within one year of taking the responsibility to run the state in 1977. After a lapse of fifteen years, the election to the PRIs was held by the Left Front Government in 1978. Since then subsquently four elections were held to the PRIs with five years interval in between. This reflects the strong political will of the Left Front Government (ruling the state for more than twenty three years) to expand and consolidate democracy at the grass root level.

In West Bengal, Panchayat Bodies (Gram Panchayat at the village level, Panchayat Samiti at the block level and Zilla Parishad at the district level) are guided by the West Bengal Panchayat Act, 1973 and its subsequent amendments. For making the panchayats people's institutions in real sense of the term, this act contains many provisions. Discussion of these provisions and ground level exercise according to these provisions are the objectives of the present study. In this study the provisions in the pre–73rd Amendment to the Constitution of India were discussed followed by the provisions that resulted out of the 73rd Amendment. After the enactment of the 73rd Amendment, West Bengal Panchayat Act (WBP Act) was also amended in that line. But in West Bengal the Government is always trying their best (either through amendments in the West Bengal Panchayat Act or thought issuing administrative orders) to ensure the participation of people in the panchayat activities. According to Section 16A of W.B.P. Act, 1973 every constituency of Gram Panchayat shall have a Gram Sabha consisting of persons whose names are included in the electoral roll of the West Bengal Legislative Assembly for the time being in force pertaining to the area comprised in such constituency of the Gram Panchayat. This means all voters of the constituency of the Gram Panchayat are the members of that Gram Sabha. As per the provisions made thereunder in the said section, Gram Sabha was to meet twice in a year (one annual meeting and the other half hearly meeting). The Gram Panchayat has the responsibility to fix up place, dates and time for such meeting. The W.B.P. Act also suggests that the annual meeting may be organised in the month of May and half yearly meeting in the month of November every year. For holding such meeting, the Gram Panchayat is required to make adequate publicity announcing the agenda, place, date and hour of the meeting, so that the people may become interested to participate in the affairs of the Gram Panchayats. This section also made it clear that the attendance of the members of the Gram Sabha in the annual and

half yearly meetings were to be recorded alongwith the comments, observations and recommendations of the members attending such meeting. This was the arrangement for ensuring poeple's participation in the pre-73rd Amendment days.

With the passage of the 73rd Amendment to the Constitution and making the panchayat institutions more people-oriented, Govt. of West Bengal amended the Section 16A by enacting West Bengal Panchayat (Amendment) Act, 1994. The Gram Sabha has been substituted by the Gram Sansad. As in Gram Sabha, all adult persons whose names appear in the electoral roll of the West Bengal Legislative Assembly for the time being in force pertaining to the area of the constituency of the Gram Panchayat, are the members of the Gram Sansad. This may be called an innovation by the Left Front Government for organising effective participation of the people in the development process. In the words of the WBP Amendment Act, 1994 (to quote) : "A Gram Sansad shall guide and advise the Gram Panchayat in regard to the schemes for economic development and social justice undertaken or proposed to be undertaken in its area and may, without prejudice to the generality of such guidance and advice :

(a) identify or lay down principles for identification of the schemes which are required to be taken on priority basis for economic development of the village;

(b) identify or lay down principles for identification of the beneficiaries for various poverty alleviation programmes ;

(c) constitute one or more beneficiary committeess, comprising not more than nine persons who are not members of the Gram Panchayat, for ensuring active participation of the people in implementation, maintenance and equitable distribution of benefits of one or more schemes in the area ;

(d) mobilise mass participation for community welfare programmes and programmes for adult education, family welfare and child welfare ;

(e) promote solidarity and harmony among all sections of the people irrespective of religion, faith, caste, creed or race ;

(f) record its objection to any action of the Pradhan or any other member of the Gram Panchayat for failure to implement any development scheme properly or without active participation of the people of the area".

From this extract it can be easily realised that the philosophy behind grounding this forum is to ensure the unflinching participation of the local people in all spheres of development activities undertaken by the panchayat. It becomes an widely accepted view that inspite of spending so much of fund, the rural development is not picking up. Late Prime Minister Rajiv Gandhi once remarked that "only 15 percent of the real value of the schemes reached the genuine beneficiaries and the rest was lost due to red tapism" This situation can be changed if and only if people be put at the centre of the process of development and related decision making. For achieving this end, the Govt. of West

Bengal through Panchayat Amendment Act, 1994 incorporated the provision that budget and the plan of the Gram Panchayat must be placed at the meeting of the Gram Sansad for getting the approval.

In addition to the Gram Sansads, by inserting a new section 16 B through W. B. P. Amendment Act, 1994, the State Govt. made provisions for Gram Sabha in respect of every gram panchayat. The basic purpose was to consolidate people's participation. In the words of Section 16 B, "every Gram Panchayat shall hold within the local limits of the Gram an annual meeting, ordinarily in the month of December every year, of the Gram Sabha after completion of the half yearly meeting of the Gram Sansads". The objective of constituting Gram Sabha is to supplement the efforts of organising Gram Sansads and thereby to augment the scope of people's participation. All persons registered in the electoral roll pertaining to the area of the Gram (i.e. Gram Panchayat) are the members of the Gram Sabha. In case of a Gram Sansad, the presence of one tenth of the total number of members shall form the quorum. A Gram Sabha being a larger body than Gram Sansad, the presence of one twentieth of the total number of members (that is five percent of the total members) shall form the quorum for a meeting. However, for the adjourned meeting no quorum is necessary. This is true for both the Gram Sabha and the Gram Sansad and the adjourned meeting will be held at the same time and the place after seven days. Section 16 B of the W.B.P. (Amendment) Act, 1994 urged that notice for a Gram Sabha meeting should be given at least seven days before the date of the meeting and wide publicity of the meeting needs to be made by beat of drums announcing the agenda, place, date and hour. In Gram Sansad meeting this type of specific provisions was not in the Act. According to the provisions of the W.B.P. Amendment Act, 1994, all resolutions of the Gram Sansads are to be placed before the Gram Sabha for deliberations. The proceedings of the meeting of a Gram Sabha shall be placed in the Gram Panchayat meeting for decision making.

The present stydy is developed with the district level data available with the district authorities and the Panchayat and Rural Developement Department. The village constituency specific data are not available at the state level. As the Gram Sansad / Gram Sabha meetings are held throughout the state in a particular time period it is very difficult to attend sizeable number of Gram Sansad / Gram Sabha for an in-depth study. Keeping these constraints in view the present study is developed with the secondary data and reports available from the districts and the Panchayat and Rural Development Department.

The Study :

Though the provisions of the West Bengal Panchayat Act in respect of people's participation are very specific and well noted, the real world scenario is not that much optimistic. The partipation of people in the activities of the panchayats is normally not regular, rather most often the local people seem to be very sceptical about the activities of the panchayats. From the available statistics on the meetings of Gram Sansads and

Gram Sabhas it can be seen that the people do not feel encouraged to attend these meetings. To the common people in majority of the cases, the panchayat bodies are something like a Government department. Even after the period of twenty two years of panchayati raj, in general the panchayat bodies are yet to be successful in drawing large number of people, particularly the disadvantaged and marginalised section of the rural populace towards them. The system of convening two meetings of Gram Sansads though introduced in the year 1994 by the West Bengal Panchayat (Amendment) Act, 1994, in practice it gets some momentum only by 1996. District-wise reports available are produced in Table 1 for helping us viewing the grass root situation.

Table 1 Number of meetings of Gram Sansads held districts of West Bengal, 1996-1998

District	Total number of Gram Panchayats	Total number of Gram Sansads	Number of Meetings held in				
			May 1996	November 1996	May 1997	November 1997	May 1998
Bankura	190	2100	919	1285	1700	2100	1003
Birbhum	169	1748	NA	1666	1681	1670	345
Burdwan	278	3305	2274	3127	2880	2837	1031
Cooch Behar	128	1469	836	1469	1453	1457	1469
Dakshin Dinajpur	65	773	445	769	678	750	274
Darjeeling	103	754	427	416	302	719	555
Hooghly	211	2322	796	2102	1692	2207	200
Howrah	157	1694	NA	947	1361	1361	116
Jalpaiguri	124	1335	NA	1546	948	1330	695
Malda	147	1654	772	1279	1152	1502	788
Midnapore	514	5069	4241	4949	4297	5010	1935
Murshidabad	255	3087	1348	2259	1752	2346	NA
Nadia	187	2007	1552	1974	1816	1995	1638
North 24 Parganas	205	2474	626	2154	2102	2450	NA
Purulia	170	1540	461	1311	1078	1420	NA
South 24 Parganas	312	3726	NA	3096	2232	1861	207
Uttar Dinajpur	99	1160	726	1110	916	1160	179
T O T A L	**3314**	**36217**	**15423**	**31459**	**28040**	**32175**	**10435**

Source : Panchayat & R. D. Department, Govt. of West Bengal.
NA = Not available.

From the Table 1 it transpires that in 1996 (two years after the amendment of West Bengal Panchayat Act), of 36217 Gram Sansads in 3314 Gram Panchayats of the State only

15423 meetings were held–in percentage term this is only 42.58 percent. The scenario was changed significantly in November, 1996 when in case of 86.86 percent of Gram Sansads meetings were held. This has so happened mainly due to increasing government persuasion for making Gram Sansads meaningful. But the performance was slided down again in May, 1997 when in 77.42 percent of Gram Sansads meetings were held. In November 1997 in case of 88.84 percent Gram Sansads the meetings were held. The fifth Panchayat General Election was held throughout the state in the last week of the month of May, 1998. For this reason in May 1998 only in 28.81 percent of Gram Sansads it became possible to hold meetings. In the 1998 election the representation of people for each member was extended. For example, at the Gram Panchayat tier (in plain areas) there is one member for every seven hundred voters and one additional member for the fraction there of. For the hill areas the corresponding figure is 250. Due to this reason the number of Gram Sansads increased by 22.89 percent. The situation after 1998 Panchayat election is presented in Table 1(a).

Table 1(a) Number of meetings of Gram Sansads held in districts of West Bengal, 1998-1999

District	Total number of Gram Panchayats	Total number of Gram Sansads	Number of Meetings held in		
			November 1998	May 1999	November 1999
Bankura	190	2488	2431	2125	2175
Birbhum	167	2108	2108	2087	2018
Burdwan	277	3833	3829	3823	3735
Cooch Behar	128	1701	1701	1701	1690
Dakshin Dinajpur	65	925	924	922	924
Darjeeling	104	729	727	853	852
Hooghly	210	3001	2957	2853	2497
Howrah	157	2218	2218	2217	2161
Jalpaiguri	148	2125	2022	2027	2104
Malda	147	2021	2019	1980	1884
Midnapore	514	6463	6330	6268	6323
Murshidabad	255	3614	3614	3446	3460
Nadia	187	2639	2639	2567	2567
North 24 Parganas	200	2923	2922	2871	2890
Purulia	170	1924	1921	1876	1826
South 24 Parganas	312	4324	4285	4260	4269
Uttar Dinajpur	99	1470	1457	1470	1470
T O T A L	**3330**	**44506**	**44104**	**43346**	**42845**

In November 1998 out of 44506 Gram Sansads in 44104 meetings were held – in percentage term this is 99.10. In May 1999 in 97.39 percent of Gram Sansads meetings were held while in November 1999 this figure was 96.27 percent. Thus, from the available data it can be seen that in no year since May 1996 it is possible to hold the meetings of all the Gram Sansads as desired by the West bengal Panchayat Act.

To corroborate this finding the year-wise percentages of the Gram Sansad meetings (for the state as a whole) held vis-a-vis total number of gram samsands are given in Table :

Year	Month	Percentage of Gram Sansad meetings held	Percentage of Gram Sansads where meetings were not held
1996	May	42.58	57.42
	November	86.86	13.14
1997	May	77.42	22.58
	November	88.84	11.16
1998	May	28.81	71.19
	November	99.10	0.90
1999	May	97.39	2.61
	November	96.27	3.73

Though the Gram Sansads in the panchayati raj system is the basic unit of democracy but in sizeable number the meetings of these units are not held which amounts to simply deny the people at large without any fault of them.

If the average attendance of the members (all adult members irrespective of caste and sex are members of that Sansad) in Gram Sansad meeting is considered the scenario is not at all encouraging. In most of the cases the attendence is just more than the minimum requirement of the quorum specified in the West Bengal Panchayat Act. Let us have a glance on this aspect (Table 3)

Table 3 Average Attendance in meetings of Gram Sansads held districts, 1996-1999

District	Attendance in the meetings held (in percentage)							
	May 1996	November 1996	May 1997	November 1997	May 1998	November 1998	May 1999	November 1999
Bankura	12.00	16.00	12.00	12.00	21.00	11.00	12.00	12.00
Birbhum	12.00	11.00	12.00	11.40	15.00	11.00	12.00	10.00
Burdwan	12.00	14.00	11.00	11.57	17.00	11.00	10.00	14.00

Cooch Behar	15.45	29.00	32.00	16.00	19.00	27.00	13.00	18.00
Dakshin Dinajpur	11.00	12.00	12.00	11.00	20.00	17.00	11.00	10.00
Darjeeling	16.00	24.00	15.00	14.00	21.00	12.00	12.00	12.00
Hooghly	15.00	13.00	11.00	24.00	28.00	15.00	10.00	11.00
Howrah	14.00	15.00	13.00	17.00	19.00	13.00	11.00	11.00
Jalpaiguri	18.00	19.00	17.00	26.00	27.00	20.00	16.00	17.00
Malda	19.00	11.00	10.00	8.20	11.00	10.00	11.00	11.00
Midnapore	30.00	34.00	18.00	30.00	32.00	32.00	15.00	18.00
Murshidabad	18.00	12.00	13.00	14.00	13.00	17.00	12.00	13.00
Nadia	43.00	26.00	15.00	15.00	18.00	22.00	16.00	14.00
North 24 Parganas	21.00	13.00	10.00	24.00	12.00	11.00	11.00	11.00
Purulia	33.00	21.00	22.00	29.60	32.00	30.00	10.00	12.00
South 24 Parganas	11.00	13.00	14.50	13.00	17.00	13.00	11.00	10.00
Uttar Dinajpur	20.00	28.00	13.00	12.00	15.00	13.00	11.00	12.00

Source : Panchayat & R. D. Department, Govt. of West Bengal and District office.

From Table 3 it is observed that the people's presence in the meeting of the Gram Sansad is not widespread. According to the West Bengal Panchayat Act the quorum for a meeting of the Gram Sansad is one tenth, i.e., 10 percent of the total number of members of the Sansad. The desirable limit is the maximum participation of the members of that Gram Panchayat Constituency (i.e. the Gram Sansad). In West Bengal, on an average, there are 746 members in a Gram Sansad (i.e. number of voters in a Gram Panchayat constituency). In case of May, 1997 meetings the maximum presence is 32 percent in Cooch Behar. The participation percentage varies from district to district reflecting only the strength of the panchayats to mobilise the local people towards the activities of the panchayats. The main reason for such low participation, as it is felt and found, is that the panchatats are not active (mostly) in making people interested in the activities of the panchayats. The common masses in the rural areas are yet to accept the Panchayat bodies as their own institution. As per their perception these institutions are nothing but extension of the block level government offices. Besides this, the proper respect to the common people is not shown by the panchayats when people approach panchayat for their work. Until and unless the common people be given adequate and proper attention the belongingness with the panchayats will not emerge. The panchayats will remain as an extension of teh bureaucracy from the block level to the village level. The attendance in the Gram Sansad meetings did not improve perceptively even after the constitution of the new bodies after the Fifth Panchayat General Election in May 1998. The state average was 16 percent in November 1998, 12 percent in May 1999 and 13 percent in November 1999. Starting from the Gram Panchayat level to the district level, all are satisfied with achieving the quorum prescribed in the WBP Act. This is something like achieving the target set from the above —quantity is ensured in lieu of the

quality. The Gram Sansad meeting has a difinite end in view, that is, the involvement of more people in the panchayat activities and bringing transparency and accountablity in the works of the panchayats. This end is partially realised.

Next to Gram Sansads, we may now examine the case of Gram Sabha which is another forum for people's participation in panchayat activities. In spite of the State Government's best efforts since the passing of the WBP Amendment Act in 1994, at the end of December, 1995 only 8 districts (Table 4) reported that the Gram Sabha meetings were held in time (the Gram Sabha meeting is scheduled to be held in the month of December every year). However, since December, 1996, the situation improved a lot and in all the districts the meetings were held (but not in all the gram panchayats of the districts except Cooch Behar). For each gram Panchayat there should be a Gram Sabha meeting. So it is expected that all the Gram Panchayats should hold it. But in December 1996 only 62.48 percent of GPs in the state hold this meeting.

Table meetings of the Gram Sabha

District	No. of Gram Sabha	Total no. of December, 1995	December 1996	December 1997
Bankura	190 (100)	169 (88.9)	NA	163 (85.8)
Birbhum	169 (100)	NA	146 (86.4)	156 (92.3)
Burdwan	278 (100)	NA	186 (66.9)	188 (67.6)
Cooch Behar	128 (100)	72 (56.3)	128 (100)	128 (100)
Dakshin Dinajpur	65 (100)	31 (47.7)	51 (78.5)	56 (86.2)
Darjeeling	103 (100)	NA	55 (53.4)	58 (56.3)
Hooghly	210 (100)	NA	128 (61.0)	168 (80.0)
Howrah	157 (100)	89 (56.7)	79 (50.3)	98 (62.4)
Jalpaiguri	124 (100)	NA	62 (50.0)	65 (52.5)
Malda	147 (100)	NA	99 (67.3)	105 (71.4)
Midnapore	514 (100)	508 (98.8)	312 (60.7)	389 (75.7)
Murshidabad	255 (100)	131 (51.4)	187 (73.3.)	198 (77.6)
Nadia	187 (100)	187 (100)	171 (91.4)	178 (95.2)
North 24 Parganas	205 (100)	NA	84 (41.0)	158 (77.1)
Purulia	170 (100)	NA	105 (61.8)	115 (67.6)
South 24 Parganas	312 (100)	150 (48.1)	195 (62.5)	208 (65.7)
Uttar Dinajpur	99 (100)	NA	82 (82.8)	86 (86.9)
T O T A L	**3313 (100)**	**1337 (40.90)**	**2070 (62.58)**	**2517(76.00)**

Source : As in Table 1.

Note : Figures in percentese Indiscate percentages.

In December 1997, however, it was possible for 75.97 percent of GPs to hold Gram Sabha meeting. In December 1998 through persuasion from the State Govt. the situation further improved – out of 3330 GPs in this state 2773 GPs hold Gram Sabha meeting. The percentage coverage of few districts is worth mentioning. To name a few, Burdwan and Dakshin Danajpur 100 percent, Nadia 97 percent, Uttar Dinajpur & Cooch Behar 99 percent. Out of 3330 Gram Panchayats, 567 Gram Panchayats per unit did not hold this meeting. In December 1999, however, the Gram Sabha meeting was held in 80.72 percent of Gram Panchayats.

In the table 5 is presented the list of districts where 90 percent and above of the gram panchayats organised gram sabha meeting in 1998 and 1999

Table 5 List of District where percentage coverage of Gram Sabha Meetings 90 Percent and above

1998		1999	
1. Birbhum	2. Burdwan	1. Cooch Behar	2. Dakshin Dinajpur
3. Cooch Behar	4. Daskhin Dinajpur	3. Darjeeling	4. Howrah
5. Darjeeling	6. Howrah	5. Malda	6. Murshidabad
7. Malda	8. Murshidabad	7. Nadia	8. North 24 Parganas
9. Nadia	10. North 24 Parganas		
11. South 24 Parganas	12. Uttar Dinajpur.		

The performance of four districts, e.g. Birbhum, Burdwan, South Twenty Four Parganas and Uttar Dinajpur slided down in 1999 to less than 90 percent as more than 10 percent of the gram panchayats failed to convene the meeting. The state of these four districts are given below for an overview.

District	Total No. of Gram Panchayats	No of Gram Sabha meeting convened in 1998	No. of Gram Sabha meeting convened in 1998
Birbhum	167 (100	162 (97.0)	117 (70.1)
Burdwan	277 (100)	277 (100.0)	160 (57.8)
South 24 Parganas	312 (100)	296 (94.9)	224 (71.8)
Uttar Dinajpur	99 (100)	98 (99.0)	87 (87.1)

The main reason for this situation is the unwillingness of the Gram panchayats to hold public meetings in an organised maner. The year-wise state scenario (Table 5) in respect of holding of Gram Sabha meeting will make this clear.

Table 6 Gram Sabha Meeting : State Scenario

Year	Total No. of Gram Sabha	No of Gram Sabha where meetings held	No. of Gram Sabha where meetings not hled
1995	3313 (100	1337 (40.36)	1976 (59.64)
1996	3313 (100)	2070 (62.48)	1243 (37.52)
1997	3313 (100)	2517 (75.97)	796 (24.03)
1998	3313 (100)	2773 (83.27)	557 (16.73)
1999	3313 (100)	2569 (77.15)	761 (22.85)

Note : Figures in parcentheses indicate percentages.

The average number of electors in a Gram Panchayat is around 10000. For example, as on December 1999, in Purulia average number of electors in a G. P. was 7512 while it is 11074 in Burdwan, 9707 in Malda. The average attendance was extremely poor. As an illustration, the case of few districts (as in December 1999) for which information was available is given below :

District	Average Number of electors per Gram Sabha	Average attendance in Gram Sabha meeting
Jalpaiguri	10683 (100)	684 (6 percent)
South 24 Parganas	10179 (100)	350 (3 percent)
Purulia	7512 (100)	557 (7 percent)
Malda	9707 (100)	514 (5 percent)
Uttar Dinajpur	11535 (100)	323 (3 percent)
Dakshin Dinajpur	10688 (100)	447 (4 percent)
Hooghly	11060 (100)	1039 (9 percent)
Burdwan	11074 (100)	471 (4 percent)

From the information furnished above it is observed that people are rarely participating in the meetings of gram sabha. There are efforts from the end of the state government but the contents and philosophy of the government directions are not being realised appreciably by the grass root panchayati raj institutions. The main reason of people feeling disinterested in coming to the forum of Gram Sabha is that the decisions of this forum are not binding on the Gram Panchayat on one the hand and on the other hand the members pay little heed to the demands and decisions of the people at large.

In addition to Gram Sansad and Gram Sabhas, the State Govt. in Panchayat and Rural Development made it compulsory to constitute beneficiary committees for the execution of any area specific scheme. The objective is to ensure the participation of local people and transparency in the preparation of plans and execution of the development schemes.

According to the directions of the State Governement "the term beneficiary broadly means ... the people of the locality who would after the implementation of the scheme directly enjoy the usufruct of the assets created from the scheme". The panchayat functionaries and the people's representatives of different constitutional bodies may be associated with the beneficiary committees, but in the capacity of advisers only.

In the executive order issued (for the formation of the beneficiary committee) by the Panchayat and Rural Development Department of Government of West Bengal it is specifically mentioned that all efforts should be made so that fifty percent of the members of the beneficiary committee will be from the weaker section population, namely, scheduled castes, scheduled tribes, and women and from below poverty line families. The State Govt. prescribes that in a beneficiary committee there can be maximum nine members. The beneficiary committee thus formed will select their own leader, but no panchayat member or any elected representative or any panchayat or block official cannot be the leader. For enhancing the people's participation in the activities of the panchayats, the state government made the provision that the decision of a Gram Sansad regarding the constitution of the beneficiary committee cannot be questioned in any meeting of the Gram Sabha. Therefore, the Gram Sansad had the prerogative to constitute beneficiary committee for any work in the jurisdiction of the gram sansad.

In most of the schemes implemented at the Panchayat Samiti level (Block) and at the Zilla Parishad level (District) the beneficiary committees are formed accordingly. But at the Gram Panchayat level the formations of beneficiary committees are yet to take full round. The functioning of these committees varies from scheme to scheme and block to block.

For enhancing the people's participation and to bring transparency in the panchayat bodies the Govt. of West Bengal decided to constitute Vigilance and Monitoring Committee on centrally sponsored Rural Development Programmes at District and Block levels. Both at the district and the block level the state government included the representatives from villagers, non-government organisations and professionals. In these committees,

the representatives of national level parties recognised by the Election Commission and having representation in the West Bengal Legislative Assembly, namely Communist Party of India (Marxist), Indian National Congress, Communist Party of India and Bharatiya Janata Party are also included.

Conclusion :

From the discussion above it is being realised that the working of gram sabha in general does not present a promising picture. But it is no denying fact that this forum has immense importance in making development participatory and strengthening democracy at the grass root level. The forum need necessary powers and functions. The state governments are authorised to frame laws relating to powers and functions of the gram sabha–for this reason the functions assigned to the gram sabha differ from state to state. The Karala example of formulating people's plan has demonstrated that without the political will of the government in power the meetings of this forum cannot be made successful. It must be reiterated that for strengthening the democracy in the country the forums of Gram Sabha and Gram Sansad have tremendous potentiality. Through this forum the participatory process will be established, promoted and consolidated. In the words of Jayaprakash Narayan : "To me gram sabha signifies village democracy. Let us not have only representative government from the village upto Delhi. One place, at least let there be direct government direct democracy .... The relationship between panchayat and gram sabha should be that of Cabinet and Assembly"

For making the people's participation in the development process ensured it is disirable that the relationship between gram sabha and gram panchayat should be harmonious and supportive. But a workable relationship between gram sabha and gram panchayat is yet to be built up - in more or less all the states. In most of the states the gram sabha recommendations are not paid adequate attention to at the gram panchayat level, as a consequence the demands of the local people remain unfufulled and recurrence of this sort of situation leads to apathy of the local people in such meetings. The apathy and lack of interest of the people towards the gram sabha and gram sansad can only be reduced if these grass root forums of people can be strengthened through assignment of more powers and functions. The Report of the Study Team on the position of Gram Sabha in Panchayati Raj Movement set up by the Govt. of India in 1963 made a useful recommendation for building up a working relationship in between gram sabha and gram panchayat. It is better to conclude the present chapter by quoting from the report. To quote :

> "..... *in order to strengthen the Gram Sabha, it is necessary to strengthen the Panchayat itself and to enable the two work out a proper relationship between them. Since panchayat is the executive of Gram Sabha, strengthening of the executive and defining the role and relationship of the Panchayat and Gram Sabha will strengthen the sabha itself*"

Sometimes it is also suggested that enhancement of the frequency of the meeting of Gram Sabha (in case of West Bengal Gram Sansad) from the existing two (most of the states prescribed two meetings of Gram Sabha in a year) to four can increase the effectiveness of the Gram Sabha meeting. More meetings of the people can build up better rapport and mutual exchange. The Committee on Decentralisation of Powers in Kerala (known as Sen Committee) remommended the increasing of the frequency of the gram sabha meeting from the existing two to four in a year. Thus Gram Sabha should be made an effective body in the panchayat framework for ensuring the participation of people in the process of development ; this will help maintain transparency and accountability also in the works of the panchayat bodies.

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IMPACT OF INDUSTRIAL TOWNS ON SURROUNDING REGION : A FAMILY BUDGET STUDY

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A number of industrial towns emerged during the past several decades as a part of the national industrialization programme in India. Being new towns they opened up possibilities of diverse economic activities, attracted large number of migrants and became responsible for stepping up the speed of urbanization process in the respective regions. The present study selects five steel towns of India for an in-depth study of which four are relatively new, viz. Bhilai, Durgapur, Rourkela, Bokaro, and one is relatively old, viz. Jamshedpur. The study attempts to find the nature of interaction between the towns and the respective regions from selected aspects.

Regional growth experiences of the less developed countries tend to indicate the inadequacy of the neo-classical location theory, particularly due to the restrictive assumptions. Under highly idealized situation neo-classical theories advocated self-equilibrating mechanism and convergence in the context of regional growth. But at the same time the fact remains that the operation of the market forces, instead of initiating a tendency toward convergence, accentuates inequality between regions. A number of regional growth models emerged with the purpose of explaining regional disparity and growth through disequilibrium. They include, in the main, theories of unbalanced growth[1], cumulative imbalance[2], centre-periphery model[3], growth pole mechanism and propulsive industries[4]. With this backdrop the present study aims at examining the interrelation between the industrial towns and their surrounding region from a selected angle, viz. household sector consumption expenditure taking place at the urban centre and the resultant expenditure multiplier. The theoretical framework of regional growth process (Chart–1) encompasses widely discussed concepts of spread/backwash, dominance-dependency relation, economic base and the various linkage effects.

To start with the centre-periphery approach, Friedman develops a general theory of polarized development. The economic growth of a single region can be traced to some natural resources depending upon the locational advantages, and the existence of external demand for them. In the long run, the growth potential of the region will depend on the extent of its resource-utilization and its participation in the rapidly expanding economic sectors of the total economy. The theory considers economic growth as a function of changes in the structure that limits a system's capacity for expansion. A decisive role is attached to the authority-dependency pattern. Dominant core and dominated periphery together constitute a relatively stable spatial system so that the latter is successfully

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colonized so as to sustain the continued growth of the former. The structural transformation of social systems are initiated by a process of innovation which calls for an interaction between the centres of innovation (core region) and the peripheral region characterized by a lower potential of innovation. Friedman points out the following major feedback effects of the dominant core over the periphery :

*i. **Dominance effect*** is seen the net transfer of natural, human, capital resources to the core.

*ii. **Information effect*** works through the increase in potential interaction between the core and the periphery and tends to induce innovation in the region.

*iii. **Psychologial effect*** is the creation of condition favourable to continued innovation at core, particularly by reducing risk by imitation, and creating expectation for further innovation.

*iv. **Modernization effect*** is manifested in the transformation of existing social values and institutions and greater acceptance of rapid cumulative change through innovation.

*v. **Linkage effect*** operates in the tendency of innovation to breed other innovation through a chain effect and in the creation of new markets.

*vi. **Production effect*** works through the exploitation by the innovators of their temporary monopoly position, leading to increase in specialization, external economies, increased efficiency in the use of social overhead facilities, and ultimately to increase in production.

The present study

On various possible channels of growth transmission, e.g. spread effect through the job market interaction, trade and financial flows, production (input-output) and expenditure linkages, this study exphasizes the income-expenditure linkages. Most relevant in this connection are, the disbursement pattern of the personal income observed in the centre and subsequently multiplier effect of the household sector purchase of wage goods from the local, sub-regional area. Analysis has been based on the reports of family expenditure surveys undertaken by the Labour Bureau, Government of India for various years.

Household expenditure surveys

In this section our purpose will be to explore the degree and nature of interaction through the personal expenditure, and to identify those expenditures ..... in the family budget account which can be satisfied by purchases at local level, and are relevant for local income generation. We would observe the share of such expenditure items in the total monthly disbursement of an average family, and estimate the sources of leakages.

Family Income Expenditure surveys carried on by Labour Bureau, Government of India, for the steel towns Durgapur, Jamshedpur, Bhilai and Rourkela have been the main

sources of data. They cover only the industrial workers. Household expenditure has been considered to be one of the main channels of income multiplier. In the standard family expenditure surveys conducted by the Labour Bureau, total monthly disbursement of an average household has been considered as a sumtotal of consumption expenditure, non-consumption expenditure, household savings and investment (i.e., asset creation). Consumption expenditure is an aggregate of food and non-food items, housing, clothing, fuel, miscellaneous consumption and services. Savings and investment of the household sector have been grouped separately in the family expenditure surveys such that savings include provident fund, insurance premium, cash, whereas investment consists of household assets (both financial and physical). Assets usually take the form of securities, shares, investment in land, building, livestock and jewellery. This group includes debt repayment, purposes of debt being meeting up of social obligations mainly. Within the group 'non-consumption expenditure', remittance takes the largest share, others include donation, loan, litigations and interest payment.

The higher the proportion of consumption expenditure to non-consumption expenditure, higher will be the possibility of income multiplication, and the higher the propensities to save, investment and asset creation, the lower will be the value of local expenditure multiplier.

The monthly disbursement pattern of an average family of Durgapur, Bhilai, Rourkela and Jamshedpur indicates a close similiarity between the household expenditure pattern of these towns. So far as the tastes, preferences and the activitywise (or income-group-wise) distribution of the population do not undergo major changes, the comparison between them over time seems to be meaningful.

The income disbursement pattern of an average industrial worker in above mentioned towns draws our attention to a number of aspects (Tables 1 and 2). Following are the main observations.

1. Consumption expenditure as a percentage of total disbursement ranges between 65.0 and 80.0 percent, which confirm high income standard and substantial amount of surplus. Percentages of savings and investment were particularly high in Jamshepur indicating high standard of purchasing power of an average industrial worker. In Durgapur data were available from two separate surveys, one by Labour Bureau based on the industrial workers, another by Bureau of Applied Economics and Statistics, Government of West Bengal, samples being taken from total residents of the town. Percentage share of consumption expenditure recorded in this latter survey was higher, which implied that the industrial workers taken as a group consist of relatively high income families. Since they belong to the organized factory sector they enjoy better emoluments and higher level of savings-investment. For Rourkela data were available at two points of time. It was interesting to find that percentages of consumption expenditure and remittances declined while share of savings-investment recorded an increase. The implication is that the workers who came as migrants have settled down over time and brought their families.

2. Percentages of household expenditure going to investment on land and livestock in Durgapur were observed to be rather small (0.3 persent). Very little local linkages were, therefore, created through this channel. The low degree of preference of the residents regarding investment on land may be explained by the migrant character of the people. Comparatively high proportion of the migrants of Durgapur were from urban areas (Census Reports, Migfration Tables), with a low attachment to land. Percentages of life time migrants coming from Bangladesh, and percentages of those coming from Calcutta metropolitan districts and settling here semi-permanently were rather high. These people had little interest in land. Only those coming from the neighbouring districts had some landed property in their place of origin, and might have some incentive for making investment in land.

3. Non-consumption expenditure, of which remittance was the main, accounted for 5.8 percent to 9.5 percent of the total disbursement of the residents of the steel towns. High proportion of migrants in the total workforce of the steel towns may explain the high percentages of remittance and may be taken as leakages from the income flow. It is presumed that as the towns reach a particular stage of maturity, the migrants gradually settle down, and the percentage of remittance declines.

When the detailed break-up of the consumption expenditure is taken into account, share of food items was observed to be lower than average state level figures, while such percentages lie between 70.0 and 72.0 in urban areas of West Bengal, Orissa, Madhya Pradesh and around 80.0 percent in Bihar (as per National Sample Survey in various rounds), respective percentages for the industrial towns under consideration range between 50.0 and 60.0. This is due to the fact that the industrial workers belong to a higher income strata.

Within food group, three subgroups were inentified, viz. cereal and cereal products, perishable commodities (e. g., fish, meat, egg, milk, milk products, fruit, vegetables) and the residual items including pulses, sugar, oil, spices, tea, tobacco and others. Fairly high proportion of expenditure was made on the perishable commodities part of which were usually supplied from the surrounding area. This part of consumption accounted for about 19.1, 18.5, 15.3 and 20.0 percent of the monthly average of family expenditure on consumption. Similar percentages for the urban areas of the states were found to be lower the figures for West Bengal, Bihar, Madhya Pradesh and Orissa being 16.2, 10.5, 11.7 and 11.2 respectively. This implies better standard of food basket consumed and a higher than average income earned by the residents of the steel towns. Differences in tastes and habits are seen from the fact that the relative expenditure on pulse group is much higher in Bhilai and Rourkela while the share of expenditure on animal protein, milk and fruits is higher in Durgapur (and also in Jamshedpur).

A substantial part of the consumption for cereals was met through the rationing system. Information available from Census data of hats and markets (Census of India, 1971, Series 22, District Handbook of Burdwan, Part C) confirm that the major items traded in Durgapur rural region did not include paddy, rice or wheat.

The subgroup consisting of pulses, sugar, spices, tea, tobacco and other food items together accounted for 16.0 to 20.0 percent of total consumption expenditure in 1981-82. Since the local production of these items was not sufficient to meet the local demand almost all of these items were imported from outside. This is confirmed from the data available from the railway goods traffic.

The miscellaneous consumption group mainly includes expenditure on various services accounting for about 13.0 to 14.0 percent of the consumption expenditure of an average family in steel towns. Most of these items (e.g., personal services, education, amusement, transport, social-religious expenses) had strong local linkage potential which could strengthen the employment base of the town.

Residual items of the consumption basket (fuel, clothing, houseing, furnishing, etc.) seem to have only limited significance for local purchases. So far as expenses on housing, furnishing, household services are concerned, some local linkages might work in the form of construction-related activities, manufacture of wooden product, etc.

The family budget analysis of the steel towns has significant implications for the income-transmission process. First, the high expenditure leakage in various forms indicates limited scope of local imcome generation through this channel. This, however, applies for any urban area with specialized activity pattern. The more diversified is the economic base of an area, the higher is the possibility that a large proportion of consumption expenditure will be met up locally. Consumers' food habits (seen from the varying percentages of expenditure on pulses, cereals and perishable commodities) and the average income level have important impact on the composition of the consumption basket, and to some extent explained the differences in the component of household expenditure. However, taking the above possibilities of leakages into consideration it may be said about 30.0 to 35.0 percent of consumption expenditure might have direct impact for local market.

Second, with passage of time, the town reaches a certain degree of maturity which is reflected in a more balanced distribution of the population. Migrants start bringing their families as a result of which percentage of remittance declines. This was observed in Durgapur and Jamshedpur where the percentage of lifetime migrants in 1981 was fairly high.

Conclusion

The present study considers spread effect of the consumption expenditure of the residents of the industrial towns. The incidence on the local rural area had important implication. Major findings of the study can now be summarized.

The household expenditure pattern of the industrial towns was marked by fairly high degree of leakages in the form of import of consumer goods from the outside areas and a high proportion of savings and remittance in the household income. Impact on the local surrounding area was roughly estimated from the household purchase of perishable food

articles (e. g. fish, meat, egg, milk, vegetables, etc.) partly available from the local villages. Expenses made on local consumer services were also relevant. Such items together accounted for about one-third of an average household's consumption expenses in Durgapur town in 1980-81.

The incidence of urban sector purchases on the surrounding local region, though limited was not absent. The experience of Durgapur shows that personal service oriented consumption expenditure had local linkages, thus creating job opportunities in the vicinity of the town, particularly low skill tertiary sector employment.

Expenditure pattern being subject to significant leakages and links with distant areas being rather strong, polarization effects were found to be important. It is no denying of the fact that with their advanced production technologies and skill requirement, industrial towns could transmit growth impact to the backward local region only to a limited extent. Due to the nature of their industry mix such towns existed as islands in the midst of vast underdeveloped hinterland, thus enforcing dualistic pattern. It is, however, noteworthy that in the context of centre-periphery relation spread effect can not altogether be absent. Given limited scope of local purchase of wage goods, other channels of growth transmission assume importance. They include, among others, labour market interaction by way of migration and commutation and financial resource flow. Those aspects of growth transmission require separate study.

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Table 1 Average monthly expenditure pattern of four Steel Towns (percentage)

	Durgapur 1981-82	Rourkela 1981-82	Jamshedpur 1981-82	Bhilai 1965-66
Consumption expenditure	100.00	100.00	100.00	100.00
Food and intoxicants, of which	51.21	52.62	57.92	65.06
Cereals and cereal product	18.23	16.50	20.92	17.25
Fish, meat, egg	7.20	5.50	5.30	4.48
Milk and milk product	6.47	5.70	6.90	5.44
Fruit and vegetables	7.34	8.20	6.30	5.46
Pulses, oil, oilsed, sugar, spices, prepared food, etc.	19.91	16.70	20.67	29.02
Intoxicants	2.80	2.04	0.60	3.40
Clothing, bedding, footwear	4.83	13.00	7.26	7.86
Fuel and light	7.42	5.80	5.57	5.19
Housing and household appliances	12.34	8.80	12.80	7.34
Miscellaneous	13.40	17.20	14.20	14.55

Source : *Labour Bureau, Govt. of India,* ***Report on Family Living Survey among industrial workers,*** *Bhilai 1965-66, Durgapur, Rourkela, Jamshedpur 1981-82.*

Table 2 Average monthly disbursment pattern of four steel towns

Items	Durgapur		Bhilai	Rourkela		Jamshedpur
	1980-81*	1981-82	1956-66	1956-66	1981-82	1981-82
1. Consumption expenditure	81.8	72.86	79.59	74.33	72.42	65.35
2. Non-consumption expenditure of which	5.8	6.21	7.82	9.5	6.3	8.06
Remittance	4.3	5.24	7.57	8.89	4.9	7.12
3. Savings and investment (includes debt repayment)	12.4	20.97	12.59	16.17	21.23	26.58
Total disbursement	100	100	100	100	100	100

Source : *Labour Bureau, Govt. of India,* ***Report on Family Living Survey among industrial workers,*** *Bureau of Applied Economics and Statistics, Government of West Bengal.*

RURAL DEVELOPMENT AND RURAL-URBAN RELATION : SOME ISSUES*

*Pabitra Giri***

I

Introduction

In the literature on rural development the relations between the rural and urban sector, generally speaking, is not brought under focus. In fact, in a good number of analysis of rural development, the rural sector is visualised as a self-closed sector, which seems to be a legacy of the neglect of the spatial dimension in the main stream development economics. On the one hand, we have the romanticised view of the self-sufficient village economy, lying at the core of the Gandhian economics–which assumes away the dependence of the village economy on the urban sector, be it a town in the region or a metropolitan city elsewhere. On the other hand, we have the urban bias theory which conceives urban and rural sectors always being in conflicting relation without allowing for having beneficial impact of urban development on the rural sector. However, in today's reality the rural sector is neither a closed sector nor it may remain so. The growth of population, relative scarcity of land, technological change, and convergence of consumption basket in an age of electronic media, cannot be conducive to the concept of a self-closed village economy. Beyond a certain stage the rural economy must generate surplus, which has to be exchanged with the rest of the world. Growing rural population can not be supported even at the minimum subsistence level without diversifying the rural economy. On the other hand, the relation between rural and urban sectors is not necesarily one of conflicts. Of course it may be noted that urban sector is not a monolithic sector ; rather the urban system in a country consists of a hierarchy of towns and cities distributed over the space. The rural-urban relation is interwoven around the urban hierarchy.

Further, the nature of relatinship between the sectors may vary over space and through the stages of development. It depends on the spatial distribution of the rural and urban settlements and is influenced by the socio-political forces in villages and towns and cities. Even at a particular point of time, the relationship between a town and villages surrounding it may have both 'parasitic' and 'generative' traits.

In this paper we discuss why rural-urban relationship is an important element of understanding the process of rural development. Section 2 provides an overview of

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interrelation between the rural and urban sectors as found in the existing literature. Section 3 analyses how rural-urban relationship is an important dimension of rural development process in a developing country like India. Section 4 contains some concluding remarks.

II

Relations between the rural and the urban sector

In studying rural urban relations the first problem is to conceptualise what relation means and the second problem is to measure the extent and identify the nature of relations. Sometimes the term interaction or interrelations are preferred to the term relations, but it appears that these terms refer to more or less the same phenomenon. At one level the extent of relations can be studied with reference to transactions between the sectors which refer to the flows of goods and services, flows of financial resources, and now-a-days also to the flows of knowledge and ideas. Barring the flows of knowledge and ideas, the flows are measurable, and therefore transaction of flows is an important component for studying rural urban relation. The transactions may be exchange (market) based or may be non-market flows like fiscal transfers and remittances by households. In the context of market based transactions the concept of terms of trade arises. The balance of transactions and the movement of terms of trade are used as a basis for studying the nature of rural-urban relations and its implications for the developement of the either sector. If as a result sector usually the relation is referred as exploitative from the rural end and detrimental to rural sector usually the relation is referred as exploitative from the rural end and detrimental to rural development. There is also characterisation of the nature of relations, such as exploitative relation or generative relation based on the transactions and their impacts. Therefore it is possible that some components of transactions bear exploitative relations—rural sector being exploited by the urban sector, while other components may represent generative relations, with beneficial impact. A singular characterisation of the nature of rural-urban relation might not be possible at a point of time.

But before considering rural-urban relation one must look inside the two sectors, particularly into the urban sector, to understand their composition. Rural sector consists of villages, which are more homogeneous than the urban settlements. The size of urban settlements ranges, according to Indian Census, from a small town of 5000 population to cities with millions of population. Besides, these towns are inter-linked in a hierarchical pattern. The distribution of numbers of towns according to size class with small size class at the base looks like a pyramid. At the base, there are a large number of small towns. Then towns of next higher sizes are of relatively small number and gradually the numbers of towns / cities decline as we move from the lower order towns to higher order towns and at the top there are one or two very large metropolitan cities. While considering the nature of rural-urban relationship in a country one should keep in mind this whole system of urban settlements. There is interaction between the village and small urban settlements,

small urban settlements are related to medium towns and cities are linked with the metropolitan cities. Further the metropolitan influences or for that matter the smaller cities and medium towns influence directly the villages located nearby. Thus rural-urban relation cannot simply be a linear one but rather is a mosaic of various interrelations among the village settlement and urban settlements of different types. The nature of relationship is varying across the space, across the types of spatial units. Fanally, the rural-urban relationship should not be considered to be something static, it has its own dynamics varying over space and time alongside the variations in the initial conditions and the process of development.

Further, urban system in a country is open, not just with respect to rural sector within the country but also in relation to the rest of the world. The metropolitan cities are gateway of international influences and in this era of globalisation these cities tend to be the integral part of the global economy. The process of globalisation is very much linked with the expansion of capitalist system across the world. The spatial spread of capitalism, gradually penetrating into the remote corners of world and having those virgin areas and societies integrated more and more with the mainstream of capitalism, in fact, provides an useful perspective for the study of rural-urban relations in the developing countries (Gilbert and Gugler, 1982).

Given this perspective, we may now fall back upon the two-sector development literature, usually distinguishing between agricultue and industry rather than rural and urban (other distinction used are traditional vs. modern sector, non-capitalist vs. capitalist sector) relating to various types of links and interactions.

Market based links : These are related to the exchange of commodities and services between the two sectors through market-based transactions. These transactions are further classified in terms of input-outpur linkages and income-consumption linkages. Another dimension of the market-based links is the terms of trade, the flow of surplus and reinvestment of surplus. The multiplier process is a part of these linkages.

Flow of surplus and Terms of trade : Apart from the multiplier effect there is the important question of surplus flow as a net outcome of the various flows and transactions. The rural-urban relation will be exploitative from rural end if as a result of trade the rural sector is drained of its surplus. Apart from non-exchange flows like tax etc. an adverse term of trade for the rural sector is usually taken as an indication of an exploitative rural-urban relation.

However, the terms-of-trade is a two edged sword. Very low terms of trade for rural products would deprive the rural sector from surpluses but it would raise the demand for the rural product, of course depending on the nature of income elasticity for the rural goods. On the other hand, a very high level of terms of trade would expand market for urban products but reduce the investible surpluses available within the urban sector. This conflict underlies the dynamics of rural-urban relation, which of course in influenced and modified by the relative size of the two sectors, the class structure and political powers

of the two sectors. This dynamics is influenced by several other factors including (a) the availability of investible funds from outside, (b) the investment and consumption behavious of the agents, (c) the trends of growth of population in the two sectors, (d) the mechanism of transfer of surplus from one sector to another and (e) the proportions of "external trade" to outputs in the two sectors.

But terms of trade or exchanged based surplus fails to capture the entirety of rural-urban interaction, particularly when one evaluates the nature of interaction in terms of income only rather than in terms of income adjusted for depletion of stocks (like exhaustible resources) and external costs (pollution costs). Rural urban relations which may be beneficial in the short run in terms of income generation may not be so in the long run. We will come back to this point later.

Social-institutional links : The social-institutional links between the rural and urban sectors has not been highlighted in the traditional two sector models. Interrelationship between village and small and medium-sized towns represent an institutional configuration conducive to skill formation, attitudinal changes, minimisation of risk, and diversification of earning of the household - a set of opportunities, which cannot exist without theinfrastructure and organisation typical of an urban area.

In this context we .may take into account some of other theories of rural-urban relationship referring to the social and institutional dimensions. Urban bias theory predicts a conflict of interest between urban and rural people. This is reflected in the group formation at the political sphere, and urban group in the third world countries being in a position to control the state power, usually leads to a lower allocation of resources to the rural sector than what is warranted by its contribution to social product. Also rural surplus is drained out through an adverse terms of trade and other mechanisms.. The implicit analytical framework used in the urban-bias theory is a static one and it ignores the fact that the two sectors may be complement any to each other in the process of development.

In contrast, the literature that recognises the importance of the spatial dimension in the development process brings into focus the role of the urban sector as afacilitator of the rural development, particularly the diversification of the rural economy (Johnson 1970, Friedmann and Douglass 1978, Rondinelli and Ruddle, 1978). The urban sector provides access to larger market, and enables household portfolio diversification between agriculture and non-agriculture activities thus minimusing of various risks. However, a necessary condition for the urban sector to play the role of thefacilitator is that the urban facilities, including the agglomeration benefits, be accessible to the rural population. This quesion of accessibility is linked to the issue of dispersed urbanisation and existence of a balanced hierarchy.

Migration : Rural-urban and urban-rural migrations as well as commutation constitute important rural-urban links. However, migration can be seen as a market based link – as an exchange of labour power between the rural and urban sector and because of its

influence on the multiplier process – and also as a social-institutional link. Many of the social and institutional elements – for example education, change in attitude – playing important role in rural development are transmitted through migration.

III

Rural development and rural-urban relation

In the context of rural development important question is what may be the role of rural-urban relationship in the rural development. However, as mentioned earlier the relation between the two sectors is not invariant to the stage of rural development.

Meaning of rural development

At the outset it is necessary to examine the meaning of rural development. At one level rural development is seen as simply an increase in rural income – per capita income growth. Now it is not considered adequate for two reasons. First the usual quesion of distribution – whether the most vulnerable section of the rural society gets the benefit of such growth, the second is the issue of sustainable development.

The issue of an equitable distribution is emphasised by the World Bank : it defines rural development as a strategy 'designed to improve the economic and social life of a specific group of people - the rural poor. It involves extending the benefits of development to the poorest among those who seek a livelihood in the rural areas. The group includes small-scale farmers, tenants and the land less' (World Bank Sector paper on Rural Development, 1995, p.3). The issue of equity is also emphasised in a complementary definition that visualises reversal of power andinitiative : 'rural development is a strategy to enable a specific group of people, poor rural women and men, to gain for themselves and their children more of what they want and need. It involves helping the poorest among those who seek a livelihood in the rural areas to demand and control more of the benefits of development. The group includes the small and marginal farmers and tenants and the landless agricultral labourers (Chambers, Robert, 1983, p. 146). This also highlights the socip-political context of rural development, that is, it will take place in non-homogeneous society against an existing power and interest structure. The point is important because the influence of rural-urban interaction on rural development depends on the politics involved.

A second important point for understanding rural development is whether we should emphasise only the flow of earning generated in the rural economy without looking into the changes in its stocks–particularly the stock of non-renewable or exhaustible resources. This concern comes from an ecological perspective and emphasises the issue of sustainable rural development. That rural development should not be defined just in terms of increased flow of current income of the rural people but there must be an income growth per capita after adjusting for the possible depletion of the stock of exhaustible resources of the rural economy. If incrreased current income flow were derived through depletion of stocks of

such a magnitude that the stream of rural income starts declining in the near future, the pattern of rural development is neither sustainable nor econogically sound. In many cases the external demand from the urban sector generates income flow for the rural economy but only at the cost of depletion of rural ecological resources leading to an unsustainable development. For example, in Kano, in Northern Nigera, the growing urban demand for fuel wood made woodcutting an important activity and the economic value of the trees as a source of fuelwood outweighed its other economic values, and that resulted in deteriorating economic and ecological consitions (O'Reilly, 1987, 77-79).

The rural development can have different stages. One can think of a development process where a subsistence economy moves from inadequate subsistence to a stage with enough of subsistence, but still not generating surplus and therefore remains in the low level of equilibrium. It is possible to pass through such a phase of rural development without having any interaction with the urban sector. The self-sufficient village economy visualised under Gandhian economic philosophy is an example of such rural development, which is possible with enough of untapped natural resources in relation to the population size. But with a high rate of population growth, and in age of globalisation, with electronic-media penetration far inside the village economies, and commercialisation of agriculture and green revolution technology, the self-sufficient village economy type rural development model seems an utopia.

Once the rural economy moves above the subsistence level and travels beyond the low level of equilibrium generating surplus, the development cannot remain self-contained within the rural sector. The surplus has to be disposed of in the market and the access to the market becomes very important. Once the question of access to market for disposal of surplus output, purchase of modern inputs and getting reasonable prices becomes important the nature of rural-urban relationship comes in the forefront. Besides, at this stage rural sector for its development needs services that would be available, in view of the scale and agglomeration economies, only in urban settlements.

It must be remembered that the rural-urban interaction needs not be necessarily beneficial. For instance, with respect to information flow, the dominant flow of information and technology is 'top-down', i.e., from urban to rural, and within urban from metropolis to small town as a part of the overall process of modernisation (Gould, 1987, 45). Although there is continuous rural-urban flow of local news and information associated with the continuous exchanges of people, the long-term effect is certainly for the spread from above, through a hierarchy of urban places. The local-rural knowledge base is usually obliterated or usurped by the metropolitan agencies in the absence of intellectual property right on local knowledge. A national culture promoted by the media is strongly urban-oriented and urban bias is most explicit in education system. Ferguson (1983) has clearly shown "how even village polytechnic graduates, who have acquired skills though of value in rural areas, have very clear perception of the relative attractiveness of urban values and life-styles over rural values, perceptions that are related to economic realities and the migration behavior."

The role of rural-urban relation in the context of rural development cannot be fully understood with reference to spatial and economic dimensions only. The question of rural development, in fact any issue of development, cannot be separated from class structure and political set up. It is not just the class structure in the rural sector but the class structure in both rural and urban sector and the overall political set up which constitute the socio-political specificity of rural development. Lipton's (1977) urban bias theory may not be correct in its analysis of problem of rural development, but it rightly points out the political dimensions of the rural development problems. Lipton emphasised the influence of urban elite (of metropolitan and large cities ; he did not consider the small and medium size towns in the urban sector) in allocation of resources in favour of urban sector as the cause for rural underdevelopment and poverty. However, the political economy of conflict between rural and urban is not that simplistic, there are various interest groups in rural and urban areas (both rich and poor) (Funnel 1987, 8) and the alliance among them influences the resource allocation. Besides, there could be rural bias rather than urban bias – the point has been argued by Varshanay (1993) in the context of post-green revolution Indian economy.

In fact, in the Indian context the role of rural-urban relation in rural development will be better understood by asking the question why rural underdevelopment is engendered and perpetuated. One should keep in mind the high rate of population growth in relation to the growth of employment opportunities in general and employment opportunities for the poor in particular. The so called 'percolation theory' of growth and consequent development assumes that there willbe a relative scarcity of labour and through the increased demand for labour the benefits of high growth will percolate down. Besides, it imlocitly assumes society functions on a random selection principle so that every body - irrespective of location, class and caste and political affiliation – has the equal opportunity. It precludes therefore any growth-induced change in social structure and power politics thwarting percolation of the benefits of growth to the poor. But the real life development process in a labour surplus economy is certainly much different and the benefits of growth, in many cases are usurped by the privileged groups who themselves are by-product of growth and development effort. The emergence of rural elite, collaborating and competing with urban elite in an election-only democracy, may be instrumental to the rural bias that however has been by and large consistent with underdevelopment for a large section of rural population.

IV

Concluding points

From the above discourse the following points come out which are important for policy issues. First, rural development problem in the long run cannot be separated from the urban development and rural-urban relationship. Interaction with urban sector has possible adverse effects on the rural economy, but the strategy would be to be aware of

them and minimize their ill effects. Second, rural-urban relationship is a complex process, which have varying configuration over time and space. Therefore, any generalized policy formulation without taking into account the stage of development and other local specificity with respect to resource and social conditions is resky. Thirdly, the political dimension of the rural development and rural-urban relationship should be explicitly taken into account. As the social and political institutions tend to change in the course of development, surveillance and interventions will be necessary to ensure the desired institutional arrangement.

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Dry Land Farming - A Strategy for Survival in Drought Prone Areas : A Study in West Bengal

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I

Introduction

The strategies of intensification and chemicalisation of agriculture, introduction of HYVs etc. in the name of 'Green Revolution' technology in agriculture during the mid - 60s for promoting sustained agricultureal growth laid base the diverse environmental constraints under which agricultural growth was taking place. Hence, development programmes for sustained development of ecologically disadvantaged and economically backward regions, namely Area Development Programmes started since the Fourth Plan. But it was progressively felt that among the disadvantaged regions, the dry and semi-arid regions where water, apart from land is the over-ridding constraint, the policy goals should aim at soil and moisture conservation and less water-and land-intensive cropping. Area specific schemes for drought prone or desert areas came to be formulated to intervene in poverty perpetuating inhospitable environment'.

Identification of drought prone regions, however took several years before the introduction of DPAP in full fledged form. In the Fifth Plan, on the recommendations of the Task Force, it was initiated in 74 districts spreading over 13 states. In the Eighth Plan, it covered 615 blocks of 91 districts in 13 states.

A drought prone area is identified by low extent of irrigated area and erratic distribution of rainfall. Besides deficiencies in rainfall, other factors like temperature, wind velocity and soil characteristics result in drought conditions and crop failure. The overall productivity of these areas has been quite low. 3

The DPAP is treated as an integrated area development programme in agricultural sector and aims at optimum utilisation of land, water and livestock resources, restoration of ecological balance and stabilising the income of the people. There are different elements in it, namely (i) development and management of water resources, (ii) soil and moisture conservation, (iii) afforestation with special emphasis on social justice, (iv) restructuring of cropping pattern, (v) development of subsidiary occupation etc.

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Dry land farming, a major component of DPAP, plays a vital role in the economic development as well as in using the fuller potential of the DP regions. It is also a very important factor in the economy of these areas as most of the DPAP districts continue to depend upon mainfall as the major source of water supply.

In India, out of 286 million hectares of net sown area, only 65 million hectares are irrigated. According to Scond Irrigation Commission, 1972 only 13 percent of cropped area in the drought prone districts was irrigated. With the completion of the projects under execution, the irigated area was expected to go up to 19 percent with 81 percent of the cropped area still without irrigation. So dry land and rainfed farming continued to play a vital role in agricultural production as at present.

At present dry lands comprise and contribute 42 percent of the total foodgrains. These areas produce 75 percent of pulses and more than 90 percent of sorghum, millet, groundnut and pulses from arid and semi-arid regions.[4]

Besides the above, the land availability per capita is likely to shrink from 0.48 hectare to 0.15 hectare by 2000 AD due to alarmingly increasing population. Naturally the maintenance of present rate of per capita availability of foodgrain, pulses and oilseeds in days ahead will be a serious concern of the planners.[5]

Against this backdrops the present note is an attempt to review the performances of the dry land project and its impact on income, employment and poverty.

Objective : The objective of the study is to examine the efficacies and impact of some dry land crops in a DP resion on income and employment of the people, and thus, in reducing poverty.

Hypotheses : The following are the hypotheses to be tested in our study : (i) Cropping pattern in the DP region changes in favour of dry land crops, and the growth rates of some dry land crops are more than the growth rate of the main crop paddy.

(ii) Dry land farming, particularly vegetables in rainfed conditions and sabai in the high lands has significant impact in income of the beneficiary households.

Data Base and Methodology :

For the study, both primary data and secondary data have been used. For the efficacy study of some crops in the DP region of West Bengal, some mateorological data have been collected to examine the changes in cropping pattern. Two districts, namely Midnapore (West) and Purulia have been selected.

For an indepth study of dryland farming two cross, namely vegetables in dryland areas in rainfed condition and sabai grass in barren highlands are selected. Data of vegetable cultivation are collected from two randomly selected villages from Midnapore (West) district DP region. For our study, 48 households are selected at random from these villages. Altogether 36 households from two villages (one with sabai cultivation and another not) of Purulia district (100% DP district) are selected on random sampling basis for the impact study of sabai cultivtion on household income and employment.

The colected primary and secondary data have been subjected to various statistical techniques for analysis. We used frequency and percentage distribution, average, variance, ratios, correlation, t-test and linear regression for analysis of data.

II

Dryland Farming : Indian Scenario

The concept of dryland farming came from the Fourth Plan onwards. It is different from arid or desert areas with rainfall below 375 mm. along with scanty irrigation facilities as well as areas with assured rainfall of 1125 mm. Keeping this criteria in mind, with Fourth Five Year Plan it was estimated that as many as 128 districts of India fall into this category. These districts account for nearly 68 million hectares or about one half of the total net sown area. Out of these districts, the very high intensity dry farming areas (with raifall ranging from 375 mm. to 750 mm and irrigated area below 10 percent of the cropped area) mainly cover central parts of Rajasthan, Sourastra region of Gujarat and rain shadow region fo Western Ghats in Maharashtra and Mysore. Twenty five districts fall in this area and account for about 18 million hectares of the net sown area. Only about 5 percent of the cultivated area was under irrigation, which was responsible for instability in agricultural production. Out of the remaining districts, 12 districts had irrigation covering about 30 to 50 percent of the cropped area. Other 9 districts spread out mainly in Madhya Pradesh. Gujarat, Maharashtra, Andra Pradesh, Mysore, Uttar Pradesh, parts of Haryana and Tamil Nadu represent the typical dryland farming tracts with an area of 42 million hectares of which 5 million hectares were irrigated. These areas received an annual rainfall ranging from 750 mm to 1125 mm.

Government Strategies : In the Second Plan 45 dry farming projects, covering about 400 hectares each, were taken up in different states and were extended through the Third Plan. They aimed at demonstrating the benefit of improved dry farming practices in low and erratic rainfall areas. In the Fourth Plan, the programmes were (i) research into improved dry farming technology and (ii) application of such technology to dry farming areas. Research on dry farming techniques was conducted at a number of centres. In this plan research was done on the basis of All India Co-ordinated Project. Under this project, various aspects such as breeding, drought resistant varieties, water harvesting, minimum irrigation, minimum tillage etc. were emphasised on different agro-climatic and soil conservation conditions. In addition, research programmes were intensified at the central Arid Zone Research Institute, Indian Grassland and Fodder Institute and eight soil conservation centres. Agricultural Universities were also among the dry farming research programme.

On the basis of available research findings the main constituents of the new technology for dry farming are (i) soil management, (ii) harvesting of water (iii) new crop varieties and (iv) new agronomic practices.

Soil management would include measures relating to soil structure, soil fertility and correction of alkalinity of the soil. It is observed that most of the rainfall in dry areas is received from the South-West monsoon and because of the poor soil structure and undulating topography, much of the moisture is lost. Thus the aluminium soil and polythene sheet are used. Regarding new crop varieties the development of quick yielding and photo-insensitive varieties has opened up possibilities of double cropping over larger areas. Among the new agronomic practices would be included the application of nutrients through foliar feeding.

In the Sixth Plan approach paper, greater emphasis was given on dryland/rainfed arable lands. Areas with annual rainfall of 750 mm. to 1125 mm were be covered under these practices with some exceptions to meet specific local situations. In selecting such areas, availability of technical knowhow based on research and development and recommendations for crop planning of either ICAR's dryland research centres or agricultural universities would be relied upon. Also, areas having representation from tribal and scheduled classes of the society would be preferred in undertaking this programme.[9]

In the Seventh Plan, special efforts were given on increase in rice production in the eastern region and for dryland and rainfed agriculture. A breakthrough in dryland farming by raising the output of millets, pulses and oilseeds would reduce the inter-crop imbalances. That would also help small and marginal farmers as these areas are predominated by this section. A new centrally sponsored scheme, namely the National Watershed Development Programme for rainfed agriculture was introduced by merging the onging programmes as the most suitable physical unit for land treatment and water management, which is the pre-requisite for scientific development of dryland agriculture.

In persuance of the new 20-point programme announced in January 1982, action was initiated for the development of dryland/rainfed farming through the strategy of (a) intensive approach aimed at integrated development of the selected micro-watersheds and (b) extensive approach for promoting the adoption of available technologies like use of drought resistant seeds, fertilizers, seed-cum-fertilizer drill and other implements. In 1984-85, works had been done in about 4,400 micro-watersheds covering about 4.2 million hectares. In 1983-84 and 1984-85, Rupees 10 crores were allocated in both the years. The above mentioned schemes were implemented in 19 selected districts located in 15 states. A world Bank assisted pilot project for watershed development in rainfed areas was also initiated in the states of Karnataka, Andhra Pradesh, Maharashtrya and Madhya Pradesh at total cost of Rs. 44.23 crores.

In the Eighth Plan, emphasis was given on the development potential of drylands, plantation of horticulture etc. in 15 broad agro-climatic zones.[11]

III

Characteristics of the Study Area

The characteristics of the study area can be grouped into two categories - physical and socio-economic characteristics.

Physical Characteristics :

The drought prone areas are distinctly dissimilar in several aspects. The physical characteristics of the drought prone regions of West Bengal are discussed in this section. From the point of view of aridity, the DP areas can be divided into four categories on the basis of annual rainfall which determines the degree of aridity. They are (i) arid districts with rainfall upto 375 mm, (ii) semi-arid districts with rainfall from 375 mm to 750 mm, (iii) sub-humid districts with rainfall ranging from 750 mm to 1125 mm and (iv) humid districts with rainfall above 1125 mm.

In humid areas, 13 programme districts with average rainfall above 1125 mm fall in this category. They are located mainly in Bihar, West Bengal and Orissa. These districts are frequently affected by drought despite the high annual rainfall.

In the Project area of West Bengal, DPAP covers 7 blocks of Bankura district, 7 selected blocks of Midnapore and all 20 blocks of Purulia district. The physical characteristics of these 3 districts are given in Table 1.

Table 1 Physical characteristics of DP districts of West Bengal.

Item No.	Items	Districts		
		Purulia	Bankura	Midnapore
1.	Annual Rainfall (mm)			
	1970	1363	1539	1320
	1980	1168	1227	1386
	1990	1617	1743	2007
	1995	1701	1616	1769
2.	Percentage of irrigated area to sown area.			
	1983-84	352	37·79	24·31
	1990-91	22·00	45·00	30.61
	1997-98	—	70.92	45.07
3.	Intensity of cropping			
	1970	107	106	109
	1983-84	102	107	118
	1990-91	115	129	146
	1997-98	—	140	152
4.	Soil typeRed sandy	Red sandy soil	Red sandy soil	soil

Source : BAES, Govt. of West Bengal - **Disrict Statistical Hand Books.**

Socio-Economic Conditions : The decline in the poverty ratio in the Eastern and Central regions of India compared is low. The impact of the poverty alleviation programmes is still lower in the DP areas of these regions. The extent of rural poverty in these districts can not be directly estimated since NSS data on household consumption expenditure are not available at these levels. However, some idea on their relative economic and infrastructural under-development can be made using some indices as given in Table 2.

Table 2 Some Indicces of Economic and Infrastructural underdevelopment and Ecological Disadvantase of the districts of Purulia, Bankura and Midnapore.

Sl. No.	Indices	Districts			West Bengal
		Purulia	Bankura	Midnapore	
1.	Per capita Income at current prices				
	1970-71	394	483	416	1047
	1980-81	1187	1255	988	1179
	1990-91	3467	4485	4404	4673
	1995-96	6548	8861	8743	8491
2.	Percentage of urban population				
	1971	8.26	7.47	7.63	24.75
	1981	9.00	7.60	8.50	26.50
	1991	9.44	8.29	9.85	27.10
3.	Percentage of workers in non-agricultural sector (Rural)				
	1981	38.90	38.00	33.10	48.50
	1991	20.64*	20.38*	32.47	47.04
4.	Literacy rate (%)				
	1981	29.80	36.50	38.00	40.90
	1991	43.29	52.04	69.32	57.70
5.	Population per bank office (in thousand)				
	1998	23	19	20	15
6.	Length of road (PWD) in km. per 100 sq. km.				
	1998	12.90	15.60	14.80	19.60
7.	Percentage of villages electrified				
	1998	36.00	39.10	43.20	70.40
8.	Drought-prone area ('000 hect)	27.87	110.0	270.90	659.60
9.	Percentage of cultivable area to total area				
	(i) Average of 1981-82				
	to 1985-86	51.80	52.20	52.70	63.80
	(ii) 1997-98	56.70	52.10	63.40	62.90
10.	Percentage of area under main crop (rice)				
	1987-88	71.40	77.00	95.00	69.00
	1997-98	88.50	87.10	84.20	71.80
11.	Rice yield per hectare (kg)				
	1990-91	1307	1941	1492	1795
	1997-98	1890	2738	2150	2243

Sources : Government of West Bengal : Economic Reviews & Annual Action Plan on Agriculture of the districts.

Note : * - Project area.

Table 3 Changes in cropping and cropping pattern in Midnapore, Purulia Districts Vis-a-vis the whole of West Bengal.

Item	Midnapore					Purulia					West Bengal				
	1960-61	70-71	76-77	87-88	95-96	60-61	70-71	76-77	87-88	95-96	60-61	70-71	76-77	87-88	95-96
Gross cropped area ('000 ha)				1095	1193	-	-	318.0	358.4	350.5	-	-	7596.8	7505.3	8404.5
Net cropped area ('000 ha)				881	845	-	-	312.6	335.8	329.0	-	-	5542.8	5405.9	5463.6
Cropping intensity				124.3	141.2	-	-	101.7	106.7	106.5	-	-	136.9	138.8	155.5
Cropping Pattern															
Pice toal	88.09	88.3	84.8	89.38	76.99	89.04	85.27	85.6	80.5	82.9	74.99	72.04	71.4	71.6	79.2
Boro	0.92	5.33	0.84	5.42	7.56	0.0	0.06	0.2	0.2	0.7	0.54	2.79	4.1	9.1	12.3
Wheat	0.01	1.53	2.30	2.45	2.19	0.03	0.29	2.9	2.5	0.7	0.56	4.36	6.4	5.3	3.6
Maize	0.15	0.12	-	1.1	0.80	2.06	2.05	0.2	4.7	0.4	0.91	0.74	0.6	1.0	0.6
Pulses total	9.91	5.82	6.70	NA	3.62	7.97	8.72	6.9	5.9	5.5	12.61	9.73	7.4	4.7	1.0
Oilseeds total	0.45	0.78	0.95	1.65	3.68	0.71	1.24	1.0	1.8	2.3	2.26	2.44	2.9	5.7	6.3
Jute	0.87	1.04	0.17	-	-	0.15	0.03	-	-	-	4.74	5.91	6.3	6.9	5.6
Veg (Potato & others)	1.59	1.23	3.51	4.15	8.94	0.03	0.15	0.5	0.6	0.6	1.08	1.08	2.0	2.8	3.3

Source : Government of West Bengal : Annual Action Plan on Agriculture of the districts.

It is revealed from the above information that these districts are economically backward and infrastructurally underdeveloped in comparison with other areas of West Bengal.

IV

Changes in Cropping Pattern

To study the changes in cropping pattern in two subperiods, i.e. Prior to 1976-77 (pre-DPAP) and post 1976-77 (Post-DPAP) percentages of area under different crops are considered as shown in Table 3. Here two districts, namely Midnapore and Purulia are selected. It is seen that paddy is the dominating crop in these two DP districts as well as in the whole of West Bengal. But the proportion of area under paddy in West Bengal as a whole is less than in Midnapore and Purulia districts. Again, this proportion is declining over years in all cases. Area under boro paddy is increasing in Midnapore and also in West Bengal. But the percentage in Midnapore is less than that in the state as a whole. In Midnapore, percentage of area under oilseeds and vegetables is increasing over years. In Purulia, stability in trend of percentage of area under any crop is not observed.

Using a cropping pattern Index (C P I) for two districts, we observe that the C P I values have declined for Purulia (i.e. less than one), while in Midnapore, it is greater than one in post DP period (Table 4)

Table 4 Cropping Pattern Index for Midnapore and Purulia.

Year	Purulia	Midnapore (West)
1977-78	1.037	0.992
1983-84	1.051	1.101
1988-89	0.982	1.026

Source : Government of West Bengal : **Annual Action Plan on Agriculture** of the districts.

From the performance study of growth rate of productivity of some dryland crops in comparison with paddy, we can justify their relevance in the DP areas. For this study we have selected maize as a dryland crop in Purulia district and vegetables (rainy-season) in Midnapore district. The growth rate of productivity is measured prior to and posterior to the introduction of DPAP.

Table 5 Growth of yield rate of crops in Purulia district before and after the introduction of DPAP

Period	Crop	Relevant equation	R^2	DW	Growth Rate (1/1) instanteneous	compound
I	Log M_y	6.10 + 0.0292T	0.2606	1.50	2.92	2.97
II	Log M_y	6.08 + 0.0793T	0.5478	2.67	7.93	8.24
I + II	Log M_y	0.79 + 0.0569T	0.6509	1.12	5.63	5.85
I	Log R_y	6.26 + 0.0332T	0.3879	2.22	3.32	3.38
II	Log R_y	6.86 + 0.0332T	0.3879	2.22	3.32	3.38
I + II	Log R_y	6.56 + 0.0238T	0.2735	2.25	2.38	2.41
I	Log F_y	6.75 + 0.0112T	0.0888	2.26	1.12	1.13
II	Log F_y	6.81 + 0.0360T	0.3947	2.27	3.20	3.34
I + II	Log F_y	6.69 + 0.0162T	0.40	2.04	1.63	1.64

Source : Government of West Bengal, Economic Review.

Notes : *Period–1 refers to the period from 1960-61 to 1977-78. Period–II the period from 1978-79 to 1995-96, M_y the maize productivity (yield rate), R_y the rice yield rate, F_y—the foograins yield rate and T the time period.*

For all crops shown in Table 5, yield rates have been consistently higher in period II than those in period I. But in case of maize, the growth rate of yield is higher than that in paddy and other foodgrains in period II.

Table 6 Growth of yield rate of some crops in Midnapore district DP areas, 1976-77 to 1991–92

Period	Crop	Relevant equation	R^2	DW	instanteneous Growth Rate (1/0)
I	Log A_y	1.15 + 0.0141 T	.021	1.97	1.41
II	Log A_y	0.68 + 0.1428 T	.92	2.76	14.28
I + II	Log A_y	0.80 + 0.1254 T	.83	1.12	12.54
I	Log AL_y	1.14 + 0.0693 T	.22	2.37	6.93
II	Log AL_y	0.453 + 0.1703T	.90	2.50	17.03
I + II	Log AL_y	.978 + 0.1155T	.81	1.95	11.55
I	Log B_y	1.94 + 0.0624 T	.26	1.56	6.24
II	Log B_y	1.12 + 0.1587 T	.76	1.91	15.87
I + II	Log B_y	1.83 + 0.0864 T.	.71	1.57	3.64
I	Log O_y	0.23 + o.0769 T	.48	3.45	7.69
II	Log O_y	1.72 + o.2958 T	.85	2.15	29.58
I + II	Log O_y	0.025 + 0.1189T	.66	1.26	11.80

Sources : (i) Zela Krishi Karan, Midnapore (eat) – Barshik Krishi Parikalpana, 1981.
(ii) P. A. C., Midnapore (West)

Notes : *Period–1 refers to early DPAP period from 1976-77 to 1985-86 and period-II refers to late DPAP period from 1986-87 to 1991-92. Here A_y, Al_y, B_y and C_y are the yield rate of Aus paddy, Aman (local) paddy, Boro and oilseeds respectivelv and T the time period.*

In Midnapore district for all crops, yield rates have been consistently higher in period–II than those in period–I. It is also seen that the growth rates of yield of oilseeds in both period–I and period–II are higher than those of paddy (Table 6).

In the light of the above discussion, we can accept the first hypothesis that cropping pattern in the DP regions changes in favour of dryland crops and the growth rates of some dryland crops are more than the growth rate of paddy'.

V

Impact of Dryland Farming on Income of the Households

Impact of dryland farming as a major component of DPAP on household agricultural income is studied with reference to expansion of area under vegetables (in place of area under aus paddy) and sabai cultivation in barren highlands. Sabai cultivation is a drvland farming technicqe practised in those areas to which farmers are encouraged under the DPAP. Sabai industry is an agro-based economic activity which uses sabai grass as raw materials. Under water scarce conditions this is grown extensively and is used in lean seasons for making sabai ropes which provide the small and difficult months of the year.

The relevant informations of the 4 villages namely V_1, V_2, V_3 and V_4 are given in Table 7. Here, V_1 and V_3 stand for the villages with dryland faraing practice and V_2 and V_4 without it. From the table 7, the following observations can be made.

Table 7 Income of the sample thouscholds by types of villages

Indicators	V_1 (with veg. cultivation)	V_2 (without veg.)	V_3 (with sabai)	V_4 (without sabai)
1. Per capita Income (in Rs.)	4663	4070	5929	3349
2. Per acre agricultural income (PAAI) (in Rs.)	5479	3741	4452	4032
3. Per acre agricultural income from dryland farming (in Rs.)	7771	—	5053	

Source : Field Survey.

First, per capita income in both the dryland farming villages (V_1 and V_3) is more than that in the non-dryland farming villages (V_2 and V_4). Sccond, per acre agricultural income is also higher in V_1 and V_3 compared to V_2 and V_4. Third, sabai cultivation and rope making (from it) make per capita income higher in V_3 than in V_1. Per arce agricultural income from dryland farming in seen to be higher in V_1. Not only this, sabai rope making has increased potentiality in generating employment opportunities in this backward region.

The mean difference of per acre agricultural income between V_1 and V_2 is significant as revealed from a statistical analysis for V_1 and V_2. The result is given as follows.

Mean PAAI of V_1 – Mean PAAI of V_2 = 1738.04

Z value = 4.20

P value = $2.5323\ E^{-5}$

DF = 46

Sd. Error = 413.169

t ratio = 4.20661

This shows that variation on per captia agricultural income between villages with drvland farming and without dryland farming is significant at 1% level of significance.

The distribution of households by per capita family income is shown in Table 8. Most of the sample households in the selected villages using dryland farming practices (54% and 84% respectively) live above poverty line (defined at a per capita annual income level of Rs. 3370) while the villages without dryland farming practices (V_2& V_4) are having 50% of sample households living below the poverty line. This is due to a positive role of sabai rope making industry (in V_3) and vegetable cultivation (in V_1).

Table 8 Distribution of sample households by per capita income

Per Capita Income (Rs)	Proportion of households			
	V_1	V_2	V_3	V_4
Below 2000	20.83	12.5	5.55	0
2000 – 3000	12.5	29.16	0	27.77
30001 – 3370	12.5	16.16	5.55	22.22
3371 and above	54.16	50.0	88.88	50.00
Total	100.00	100.00	100.00	100.00

Source : Field Survey.

To examine the impact of dryland farming on household income the regression models of the following form have been made.

For vegetable cultivation, per acre agricultural income (PAAI) is regressed on per acre income from dryland crops (PAIDC). The relevant equation is

$$PAAI = 0.150669\ PAIDC + 381678$$
$$(4.7873) \qquad (16.7642)$$

$R^2 = 0.332543$; $\bar{R}^2 = 0.318033$

Number of observations = 48

Degrees of freedom = 46

The result indicates that the model is satistically significant at one percent level which, in a way, suggests that the variation to the extent of 33.25 percent was explained by the model.

Regressing PAAI against a dummy variable (D), where D = 1 for dryland farming (vegetable) and D = 0 for otherwise. The relevant equation is

$$PAAI = 1738.04\ D + 3740.94$$
$$(4.20661) \qquad (12.8047)$$

$R^2 = 0.277815$; $\bar{R}^2 = 0.262115$.

It is observed that 27.78 percent variation in the model is explained by the dummy variable.

For the highlands of the area, sabai cultivation and sabai rope making in lean season have a significant contribution to the income of the households. The relevant regression equation is

$$PCY = 0.337878\ PCAY + 278339\ D + 3531.29$$
$$(-0.082) \qquad (3.203) \qquad (2.004)$$

$R^2 = 0.2530$; $\bar{R}^2 = .2077$

where, PCY = per capita income

PCAY = per capita agricultural income.

But regressing PCY on D (dummy variable for sabai cultivating farm = 1 and = 0 otherwise), the equation is

$$PCY = 2761.33\ D + 394.83$$
$$(3.392) \qquad (5.897)$$

$R^2 = 0.252808$; $\bar{R}^2 = 0.230832$

Per capita income (PCY), per capita agricultural income (PCAY) and the dummy variable (D) are positively correlated (see the correlation matrix in Table 9).

Table 9 Correlation Matrix

	PCY	PCAT	D
PCY	1	0.143794	0.502801
PCAY	0.143794	1	0.30934
D	0.502801	0.30934	1

Source : Field Survey.

From the above analysis, it is evident that dummy variables (D) in both the cases (i.e., vegetable cultivation and sabai cultivation and rope making from it) have significant impact on PAAI (vegetable) and PCY (sabai) and are significant at the five percent level.

So, we accept our second hypothesis that 'dryland faming particularly vegetables in rainfed conditions and sabai in the highlands has significant impact on income of the beneficiary households'.

VI

Summary and Conclusion

Drought prone areas are economically as well as ecologically disadvantaged regions. Emphasis is given on dryland farming in different plan periods. The drought prone areas of West Bengal are relatively backward in comparison with the whole of the state. In Midnapore district drought prone areas, the cropping pattern changes in favour of superior cereals like boro paddy and some less water-consuming crops like vegetables and oilseeds while in Purulia district, it is stagnant in nature. The yield rates of all crops in both the districts in the posterior period are higher than that in the period prior to DPAP. The cultivation of vegetables in rainfed conditions and sabai cultivation in uplands has significant impact on income of the households.

Therefore, emphasis should be made on improvement of quantitative performance in respect of DPAP so that the programme could have higher impact on ecology and economy of the drought area. Target group–oriented dryland farming and farm forestry should be encouraged so that waste lands are converted into green belt yielding benefits to the poverty-stricken rural families.

Notes :

1. Sau, 1998
2. 8th Five Year, Govt. of India.
3. Jaiswal and Kotla, 1980.
4. Intensive Agriculture, 1990.
5. Do
6. Jaiswal and Kotla, 1980.
7. Fourth Five Year Plan.
8. Fifth Five Year Plan.
9. Sixth Five Year Plan.
10. Review of Seventh Plan.
11. Eighth Five Year Plan.

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Credit-Marketing Link of Agricultural Cash Crop. : A Study with Special Reference to Potato in Rural West Bengal

*Jyotish Prakash Basu**

I

INTRODUCTION

Potato is considered one of the most important commercial cash / crops in the State. The farmers, at all levels, usually take some extra initiative to cultivate this crop. They invest in large proportions considering the profitability and net returns. Potato is a high yielding capital–intensive crop. But its market like that of most other commercial crops is highly fluctuating and risk–prone. Capital strength plays an important role in an unstable market situation. It provides better staying power in speculative market situations.

This paper seeks to present some results of a field enquiry pertaining to the credit market linkage in case of potato crop. Potato being a highly perishable crop, cold stores play a decisive role in the potato market. This study has been conducted with respect to cold storage concentration areas of potato cultivation.

The paper is divided into six parts. Section-I provides the introduction. Section-II reviews some studies pertaining to the issue of inter–linked credit transaction in agrarian credit markets and some studies relating to the marketing of agricultural products with different types of credit facilities. Section-III discusses the sample frame and the methodology adopted. Section-IV examines the periodicity of sales behaviour of potato by size-groups in the cold storage concentration zone and non-concentration zone. Section-V discusses the sources of credit by size-groups in cold storage concentration zone and non-concentration zone. This section also analyses the periodicity of sale by the sources of credit. The findings obtained in the study are summarised in Section-VI.

II

Review of Literature

In recent years considerable theoritical work has been done on the issue of inter-linked credit transactions in agrarian credit markets. In the literature on the effects of inter-linkage, two contrasting views have emerged. One view is that the inter–linkage acts as an exploitative device by the stronger party to extract surplus out of the weaker party (Bhaduri, 1973, 1983, 1986. Bharadwaj, 1974). The other view, while rejecting interlinking being necessarily exploitative, explains its rationale in terms of information asymmetry

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and uncertainty (Braverman and stiglitz, 1982, Mitra 1983). According to some scholars, it also acts as a screening device in the selection of customers (see Braverman and Guasch 1984) and is also utilised as enhanced enforcenment device for execution of contracts and to reduce transaction costs in the recruitment of wage labourers (Bardhan, 1984, Ray 1998). Sarap (1991), Bhawmik and Rahim (1999) examined the forms and charcteristics of the households that are involved in interlinked credit transactions in rural India. Reddy (1992) examined the incidence of different types of linkages prevalent in the developed villages (where formal credit flow is good) and backward villages (where formal credit flow is poor), with particular reference to the consequences of these interlinkages and concluded that the type of linkage which produces the positive and negative effects may be dependent on the relative bargaining power of the parties involved.

Banik (1993) discussed the structure and operations of different credit markets in two different villages of Bangaledesh. This study revealed that informal credit markets are important parts of the credit market in both villages. The large borrowers are not so much affected by the transaction cost as small borrowers.

Ghate (1988) mentioned the major source of interlinked credit and of all rural informal credit in many countries may now be lenders who lend as part of their product market transactions.

Jasdanwala (1966) studied the inter–relations between the sales prices of grain products and the nature and extent of indebtedness of peasant households. She found that indebtedness among the poor peasant families was quite wide spread, but a major portion of the loans were from institutional agencies and therefore did not result in sales at unfavourable prices. She also writes, "Indebtedness to private agencies, on the other hand, proves harmful whether sale to creditors is laid down as conditions to loans or not. When marketing obligations are not attached, high rates of interest, which are almost inevitable to such loans, undermine the cultivator's financial position and consequently his waiting capacity". Ashoke Rudra (1982) emphasised the imperfection of the grain market that arises out of the indebtendness of the poor peasants. He states that the phenomenon of price discrimination involving weaker parties gets seriously aggravated when trading gets mixed up with money lending. The practices of dadan (advance payment against commitment of future delivery of foodgrains) are widely prevalent in many villages of West Bengal and Bihar where traders offer advance payment to poor sellers against commitment of future delivery of food grains at pre-determined prices which normally happen to be much lower than the price expected to prevail in the market at the time of delivery. Rudra's finding obviously goes against the finding of Jasdanwala in connection with the phenomenon of indebtedness of poor peasant households.

Bandyopadhyay (1991) examined the concept of vertical integration in potato cultivation in West Bengal. According to him, a new type of entrepreneur seems to have emerged in the potato areas of West Bengal with command over the farmer, his land, credit, produce and marketing net work.

Sarkar (1993) emphasised that the small sellers tend to sell off their entire stocks and leave the market by an earlier date than large sellers under restrictive conditions. In the present set up he did no consider any borrowing and lending activities.

From the above review it appears that most of the discussions on credit market remains at a semi-theoritical level. Further empirical invetigations are more on grain markets. There is a need for deeper and specific investigations into the nature and functions of potato markets in this state.

III

DATA BASE AND METHODOLOGY

This study has been carried out on the basis of data collected from primary sources in Arambag Block in the district of Hooghly, West Bengal for the period July, 1998 to December 1999. Hooghly is a district where there is a long tradition of potato cultivation with built–in infrastructure including credit and marketing facilities. This district occupies the first position in respect of both area and production of potato in the State. The block, Arambagh, also has a significant position both in respect of area under potato and marketing in the district, Hooghly. And for the purpose of collecting data a two-stage stratified random sampling without replacement is made. In Hooghly, out of its 18 blocks, Arambag block is selected purposively. Since Cold Storage as an economic agent plays an important role in the formation of patato prices over months/seasons, it is felt necessary to conduct the intensive survey amongst those mouzas where substantial concentration of cold storage facilities are in evidence. In addition to selection of such mouzas, an equal number of mouzas selected from non-concentration zone where cold storage faclities are much lees. The panchayat–wise lists of mouzas are collected from Panchayat Samiti Office, Arambag Block. Then the lists of mouzas are prepared in accordance with the cold storage concentration zone.

At the first stage of sampling eight mouzas are selected, four each from cold storages concentration and non-concentration zones on the basis of simple random sampling without replacement (SRSWOR). The second stage of sampling is concerned with the selection of cultivators. A list of all resident cultivators is prepared for each of eight mouzas selected through complete enumeration. The operational holdings of cultivators in each mouza are arranged in ascending order of the cultivated area. These holdings are divided into five catagories in such a way that each stratum covered almost the same proportion of cultivated area within a village total. The distribution of operational holdings in the selected mouzas of each zone are transformed to obtain marginal, small, medium, large and very large holdings and about 26% cultivators are selected at random from selected mouzas. Thus the sample comprises 155 holdings from the study area (i.e., 84 holdings from cold storage concentration area and 71 from non-concentration zone).

IV

Periodicity of Sale

Table 1 explains the periodicity of sale by size groups in the cold storage concentration zone and non-concentration zone. The entire period is divided between the harvesting period and Post-harvestings peiod. The month February and March treated as peak harvesting period and the month of April is also included in the same as there is a practice of farmers usually keeping some produce in the field to sell later in order to get higher prices in the month of April. The post-harvest period starts from June and ends in December. The farmers are reportedly selling bonds ; the certificates showing volumes of potato stored in a storing season by a farmer. The farmers can sell their produce part by part from cold storage. Table 1 reveals that about 61.4 percent output is disposed of in the harvest and just after the harvest period in the Cold Storage concentration zone while about 77.2 percent of total output is disposed of during the harvest and just after harvest in the non-concentration zone. In the concentration zone the post harvest sale is found to be more around the month of July, August and September. Because the producer sellers face an urgent need of cash for the cultivation of aman paddy. The post harvest sale in the non-concentration zone was maximum in the month of December.

Considered size group wise, we find out the harvest and just after harvest sale is maximum (i.e. 78.15%) in the lowest size group where as it is 55.95% for the marginal farmers belong and the same is minimum (i.e. 46.55%) in the highest size-group where 2.38% large farmers belong in the concentration zone. In the concentration zone the harvest and just after harvest sale is positively related to the size class of operational holding. The post-harvest sale spread out from June to December for each size class in the concentration zone except 3rd size group.

In the non-concentration zone the sale during the harvest and just after harvest is highest (93.9%) in the lowest size-class where marginal farmers belong and lowest (i.e. 65.62%) in the 3rd size-class where medium farmers belong. Table 1 also reveals that in the non-concentration zone the sale is concentrated mostly within February, and April. This implies that distress sale is higher in the Cold Storage non-concentration zone.

V

Analysis by Sources of Credit.

The main sources of credit are from formal sources which include commercial bank and Krishi Unnayan Co-operative Samity etc. and informal ones which include traders, money lenders, jewellery shops, friends and relatives, landlords etc. Linked credit refers to output–linked borrowing, i.e. when households settle their loan obligations by sale of output to the lenders. The trader money lenders also are often suppliers of fertilisers, seeds and pasticides on credit to the farmers on the condition that the farmers would sell their produce to them. In the area of our study, non-interlinked credit consists of credit from jewellery shops, friends, relatives and larger land owners etc.

Table 2 indicated that in the concentration zone, out of 84 potato cultivating households in the sample, only 12 households, i.e. 14.29% had borrowed from formal credit institutions exclusively 22.62%, households have reported solely interlinked credit transactions and about 10.71% of the households obtained credit through non-interlinked transactions from non institutional sources while about 17.86% households borrowed from both interlinked and formal souces.

In the non-concentration zone, about 13.46% households had borrowed only from fromal institutions. About 19.23% households have reported solely interlinked credit transactions and about 7.69% obtained credit from non-interlinked sources.

Table 2 indicates that credit availability becomes lower in the non-concentration and higher in the concentration zones. In the concentration zone, out of 84 households 18 households have taken no loan, i.e. about 21.43 percent households have taken no loan, Whereas in the non-concentration zone out of 52 households 29 households getting/ taking no loan, i.e. about 55.77 percent households getting no loan from any sources. Moreover, among the borrowers the percentage of interlinked credit is higher in the non-concentration zone than in the concentration zone.

Table 3 indicates that in the concentration zone about 22.62 percent households only borrowing inter-linked credit disposed of 77.04% percent output between March and April. About 14.29% households borrowing credit from formal institutions marketed 60.46 percent output during March and April. The capacity to withold the produce is higher for the borrowers taking loan from formal sources than from the informal sources. The smallest amount of output is disposed of between the months of March and April by the farmers who have taken no loan. They enjoy the advantage of post-harvest sale by June-December.

From table 4 we find that about 66.21% output is sold during the months of March and April by the farmers who had taken loan from the formal sources while 85.80% output is marketed during the months of March and April by farmers who had taken interlinked credit in the non-concentration zone interlinked credit about 91.67% output is disposed of during the month of March and April. Therefore, there is little scope to take the advantage of post–harvest sale if the farmers are involved in interlinked credit, non-interlinked credit or both.

Factors Leading to Harvest and Immediate After Harvest Sales

Firstly, Need Of Money. The potato cultivators take loans from both institutional and non-institutional sources. Loans are provided by institutional sources for one year for the purpose of seed, fertilisers and cash. But loans are provided by trader money lenders who are the input suppliers are for the duration of three months only and are to be paid back just after the harvest. The farmers who take loans from traders money lenders are therefore compelled to sell their produce as soon as possible after the harvest.

Secondly, lack of market intellegence. The farmer lacks information about the markets where his produce could be sold more profitably. The high degree of illiteracy, the long distances and poor cummunications make market news service difficult and of little help to the poor and small producers.

Thirdly, early sales take place to avoid risk. In many cases the avoidance of production risks and hedging against possible post-harvest low prices further induces distress sale.

VI

Summary

Findings of our study broadly suggest the following.

Firstly, the post-harvest sale was spread out more in the concentration zone. The maximum sale is concentrated within the months of February, March and April in the non-concentration zone.

Secondly, the availability or accessibility to cold storage helped in reducing the distress sale in the concentration zone and larger farmers are getting advantage of off-season price hike.

Thirdly, the percentage of interlinked borrowers is higher amongst the potato cultivators in the non-concentration zone than in the concentration zone and the post-harvest sale between June and December is influenced by the sources of credit, specially formal credit. The formal credit enhanced the scope of the sellers to remain longer in the market in post-harvest periods.

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Table 1 Quantity of total marketd at different period of tine by size-group
Cold Storage Concentration Zone

Size-group operational holdings (in acre)	% of households	Feb.	March	April	May	June	July	August	Sept	Octo.	Nov.	Dec	Total
0·1-1·0	55·95	—	686·90	278·10	—	—	46·80	62·40	68·80	45·20	36·00	10·80	1235·00
			(55·62)	(22·53)			(3·79)	(5·05)	(5·57)	(3·66)	(2·91)	(·87)	(100)
1·01-2·50	30·95	24·00	928·65	282·00	—	18·00	22·80	238·20	290·40	30·00	30·00	12·00	1876·05
		(1·28)	(49·50)	(15·03)	—	(·95)	(1·22)	(12·70)	(15·48)	(1·60)	(1·60)	(·64)	(100)
2·51-5·00	10·72	—	384·60	283·80	—	—	387·00	202·80	150·00	—	—	—	1408·20
			(27·32)	(20·15)			(27·48)	(14·40)	(10·65)				(100)
5·01-10·00	2·38	—	293·20	—	—	—	192·00	50·609	—	—	50·00	44·00	629·80
			(46·55)				(30·49)	(8·03)			(7·94)	(6·99)	(100)
All	100	24·00	2293·35	843·90	—	18·00	648·60	554·00	509·20	75·20	116·00	66·80	5149·05
		(·47)	(44·54)	(16·39)		(·35)	(12·60)	(10·76)	(9·88)	(1·46)	(2·25)	(1·30)	(100)
Size group						**Non-Concentration Zone**							
0·1-1·00	15·38	3·60	88·80	—	—	6·00	—	—	—	—	—	—	98·40
		(3·66)	(90·24)			(6·10)							(100)
1·01-2·50	42·31	126·60	280·50	67·20	—	12·00	16·80	—	19·20	—	9·00	8·40	539·70
		(23·46)	(51·97)	(12·45)		(2·22)	(3·11)		(3·56)		(1·67)	(1·56)	(100)
2·51-5·0	28·84	172·80	178·80	51·60	—	—	—	64·20	43·20	31·80	31·10	41·00	614·50
		(28·12)	(29·10)	(8·40)				(10·45)	(7·03)	(5·17)	(5·60)	(6·67)	(100)
5·01-10·00	9·62	24·00	105·00	—	—	—	22·80	—	—	—	—	37·80	189·60
		(12·66)	(55·38)				(12·03)					(19·93)	(100)
10·01 and above	3·85	216·00	—	—	—	—	—	—	—	45·00	—	—	261·00
		(82·76)									(17·24)		(100)
All	100	543·00	653·10	118·80	—	18·00	39·60	64·20	62·40	76·80	40·10	87·20	1703·20
		(31·87)	(38·35)	(6·98)		(1·06)	(2·33)	(3·77)	(3·66)	(4·51)	(2·35)	(5·12)	(100)

Figures in the parentheses represent percentage of total sale of the respective size-group.

Table 2 Description of Sources of Credit in Size Group

Size group (acre)	No. of households	No. of borrows with formal credit only	No. of borrowers with interlinked credit only	No. of borrowers with non-interlinked credit only	No. of borrowers with interlinked getting formal credit	No. of borrowers with interlinked + non-interlinked + formal	Not taking / getting credit from any source	No. of borrowers with linked + non-interlinked credit
Cold Storage Concentration Zone								
·1-1·00	47	4 (8·51)	15 (31·91)	9 (19·15)	4 (8·51)	1 (2·13)	12 (25·53)	2 (4·26)
1·01-2·50	26	5 (19·23)	4 (15·38)	—	7 (6·92)	1 (3·85)	3 (11·54)	6 (23·08)
2·51-5·00	09	2 (22·22)	—	—	4 (44·44)	—	2 (22·22)	1 (11·11)
5·01-10·00	02	1 (50·00)	—	—	—	—	1 (50·00)	—
All	84	12 (14·29)	19 (22·62)	9 (10·71)	15 (17·86)	2 (2·38)	18 (21·43)	9 (10·71)
Non-Concentration Zone								
Size group (acre)								
·1-1·00	8	—	3 (37·50)	2 (25·00)	—	—	3 (37·50)	—
1·01-2·50	22	3 (13·64)	4 (18·18)	2 (9·09)	—	—	11 (50·00)	2 (9·09)
2·51-5·00	15	4 (26·76)	2 (13·33)	—	—	—	9 (60·00)	—
5·01-10·00	5	—	1 (20·00)	—	—	—	4 (80·00)	—
10·01 and above	2	—	—	—	—	—	2 (100·00)	—
All	52	7 (13·46)	10 (19·23)	4 (7·69)	—	—	29 (55·77)	2 (3·85)

Figures in the parentheses represent percentages in respect of the cultivating households of the respective size group.

Source : Field Survey

Table 3 Quantity of Potato marketed in different period by the sources of borrowing

Cold Storage Concentration Zone

Sources of Borrowing	Average size of operational holdings (acre)	As % of households	Feb-April	June-Dec	Total
Only from Formal	1·94	14·29	753·30	492·60	1245·90
			(60·46)	(39·54)	(100)
Only from Interlinked	·78	22·62	523·50	156·00	679·50
			(77·04)	(22·96)	(100)
Only from non-interlinked	·65	10·71	218·80	34·80	253·60
			(86·28)	(13·72)	(100)
Only Interlinked + Formal	1·73	17·86	954·60	481·20	1435·80
			(66·49)	(33·51)	(100)
Only Non-interlinked + Interlinked	1·65	10·71	291·05	—	291·05
			(100)		(100)
Only Formal + Interlinked + Non-interlinked	·96	2·38	50·40	—	50·40
			(100)		(100)
Taken no loan from anywhere	1·22	21·43	415·80	777·00	1192·80
			(34·86)	(65·14)	(100)

Source : Field Survey

Table 4 Quantity of Potato marketed in different period by the sources of borrowing

Cold Storage Non-Concentration Zone

Sources of Borrowing	Average size of operational holdings (acre)	As % of households	Feb-April	June-Dec	Total
Only from Formal	3·04	13·46	208·20 (66·21)	106·20 (33·79)	314·40 (100)
Only from Interlinked	2·06	19·23	213·90 (85·80)	35·40 (14·20)	249·3 (100)
Only from non-interlinked	1·09	7·69	33·00 (91·67)	3·00 (8·33)	36·00 (100)
Only Interlinked + Formal	—	—	—	—	—
Only Non-interlinked + Interlinked	1·38	3·85	81·00 (79·88)	20·40 (20·12)	101·40 (100)
Only Interlinked + Non-interlinked + Formal	—	—	—	—	—
Taken no loan from anywhere	3·98	55·77	778·10 (77·65)	224·00 (22·35)	1002·10 (100)

Source : Field Survey

Rural Reorganisation and Rural Development in West Bengal Under The Left Front Governance

*Sudipta Bhattacharyya**

Introduction

This study seeks to look into a process of some institutional aspect of agrarian change in West Bengal. West Bengal agriculture, along with the national trend, has undergone a process of a rapid class differentiation with the advent of advanced technology. As a result the ownership of the means of production in agriculture has been concentrated to a small section of the population, who belongs to the higher classes in the society. The lower economic classes that are large in number, under unrestricted operation of the market, are losing control over the means of production and pushed back into the ranks of the proletariat. In West Bengal side by side another process of pro- poor state intervention took place that was supported by a grass root level mobilisation of the poor. Such an intervention in the form of an institutional change has been able to transform the West Bengal agriculture into a fertile small farm economy. As a result agricultural growth has been initiated, that in turn called for a process of rural development. However West Bengal agrarian economy is now waiting for a second phase of agrarian reform that must stand on the pillars of co-operative movement, literacy campaign and gender equality. The Panchayat has to take the leading role in this change. Only then it would generate a sustainable rural development by means of an expanding market.

Agriculture-Led Development in Rural West Bengal

West Bengal's agrarian reform may be described, first of all, as an attempt to ensure an effective right to the tenants in the form of 'operation barga' (recording of the name of tenants on spot). Secondly, it involves an effective acquisition of the ceiling surplus land and distribution of the same among the rural poor. Thirdly, it is a process of implementation of the minimum legislative wage rate for the landless labourers. All these measures had been implemented in the framework of a newly evolved grass root level local administration, ie *Panchayat Raj*. As a matter of fact around 14.6 lakhs of bargadars had been recorded up to June, 1994, constituting the area of more than 451.8 thousand hectares. At the same time 384 thousand hectares of vested land had been distributed among 20.78 lakhs of poor rural population (Govt. of West Bengal, Economic Review, 1994-95). West Bengal's share in national aggregate (as on 30.9.91) was highest in every sphere- 17.42 percent in the area taken in possession, 18.98 percent in the area distributed and 43.36 percent in the number of beneficiaries.

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The whole process of agrarian reform started from late seventies and gathered a momentum in early eighties. Some studies showed a high growth performance of West Bengal's agriculture since eighties, which had overwhelmed the theorists and policy makers and added a new dimension for controversy. Saha and Swaminathan (1994) using an index number series on aggregate agricultural production, claimed that, 'the exponential growth rate for all West Bengal for the period 1981-82 to 1990-91 was an impressive 6.4 percent per annum. The growth performance is striking in comparison to the past. The annual growth rate of agricultural output for the period 1965-80 was 2.2 percent'. Though some doubt had been cast regarding the validity of the official data (Datta Ray, 1994a, 1994b) based on which such a conclusion was derived, no effective challenge was made against the findings showing high growth performance of West Bengal. On the contrary, Sen and Sengupta (1995) using an alternative source of data (Comprehensive Cost of Production Studies, Ministry of Agriculture, Govt. of India) reaffirmed 'a significant trend-break in the growth rate during the eighties'. Some other studies also confirmed the trend breaks in the growth rates in rice production in particular (Mukhopadhyay and Sarkar 2001) and overall agricultural output in general (Sengupta and Gazdar 1998, Chatterjee and Roy 1998, Chattopadhyay and Das 2000, Bandyopadhyay and Ghatak 2000) during the early eighties.

The trend-break in the growth rate during the eighties in West Bengal was associated with the opening up of the horizon of diversified rural activities. As a result, some positive structural changes may be observed in recent years in West Bengal. The changes may be described in terms of the following trends.

(i) The proportion of total rural workers in India depending on the primary sector has declined quite marginally and at a slow pace, from 83.35 per cent to 82.26 per cent between 1981 and 1991. Compared to the all India figures the proportion of total rural workers depending on the primary sector declined from 77 per cent to 73 per cent in West Bengal between 1981 and 1991. Accordingly, both the secondary and the tertiary sector employment have increased. The NSSO data also reveals an increase in all subsequent rounds since 1972-73. Particularly for male the percentage of non-agricultural workers in rural workforce increased from 22.3 during 1977-78, 26.9 in 1983, 27.8 in 1987-88 and ultimately to 35.7 in 1993-94. The expansion of the same for female workers are much greater during 1987-88 to 1993-94, from 29.2 in 1987-88 to 41.1 per cent in 1993-94. The percentage increase in the total rural workforce engaged in primary sector in West Bengal during the same period was 26.98 while the secondary and tertiary sectors recorded growth rates of 51.79 per cent and 67.28 per cent respectively. Further the growth rates of rural female employment in West Bengal were higher in all the sectors during the same period. Particularly in the secondary sector it was the highest. 'Thus, rural West Bengal is in the expected path of the transition' (Arun Kumar et.al., 1995)

(ii) The per capita state domestic product for West Bengal shows a consistent tendency to stay above the national average. The rank of the per capita state domestic product (PCSDP) is 6 among all Indian states during all the years from 1980-81 to 1996-97. However, per

capita rural state domestic product from agriculture and allied activities (PCRSDP-A) are the true measures on which the magnitude and direction of the agriculture-led development depends. But PCRSDP-A is not very stable variables like PCSDP. Rather the former exhibits a bigger fluctuation than the latter. A comparison of PCRSDP-A between 1980-81 and 1993-94 at 1980-81 constant prices, which shows that in the former period value of West Bengal was Rs 757.55 that was lower than the national average Rs. 816.78. The rank of West Bengal was 11. But in 1993-94 the PCRSDP-A increased to Rs. 1075.35 that was above the national average Rs. 987.28. The rank of West Bengal also improved to 5. The shift in PCSDP and PCRSDP-A is important to analyze the process of agriculture-led development. The immediate implication of these shifts is the reduction in poverty, rise in employment and expansion of the non-farm activity in West Bengal.

(iii) The Expert Group on the Estimation of Proportion and the Number of Poor (EGEPNP) of the Planning Commission gives periodic estimation of head count poverty on the basis of NSSO five yearly findings. According to the estimate of the Planning Commission in 1977-78 when the Left Front Government came to power, the percentage of population living below the poverty line was 60.52 that was the far above the national average of 51.32. Kerala claims the first position in reduction in poverty (-59.40 per cent). The research by other scholars like Tendulkar and Jain (1993), Sen (1996), Sen (1997), Sengupta and Gazdar (1998), Chatterjee and Bhattacharyya (1998) also reached the same conclusion.

However, the head count measure is one among various measures of poverty. Based on NSSO data on clorie intake Madhura Swaminathan and V. K. Ramchandran (1999) estimated state-wise per capita calorie intake in India. According to their findings except the four states (West Bengal, Kerala, Maharashtra and Orissa) between 1972-73 and 1993-94 the calorie intake per capita per day in rural areas declined in all the states and at the all-India level. However, considering both rural and urban areas Kerala and West Bengal are only two exceptional states where the calorie intake increased between the same period. According to them at the national level the decline in rural area was from 2266 k.calorie to 2153 k.calorie. In other words , the magnitude of decline was (-) 113 k.calorie. Kerala witnessed the highest increase in calorie intake in the rural area (+406 k.calorie) followed by West Bengal (+290 k.calorie). Therefore, the data on calorie intake shows almost similar tendency with that of head count measures. Swaminathan and Ramchandran (1999) pointed out that calorie intake per person per day in West Bengal was below the national average in 1972-73 but shifted to rise above the national average in 1993-94.

The root cause behind the massive reduction in poverty in West Bengal is directly related to increase in rural employment and increase in agricultural wage rate that we will discuss now.

(iv) In earlier section we have seen that in West Bengal there was a shift in labour force towards the non-farm activity. However, there has been a positive shift of rural employment as a whole. It is evident from NSSO Survey that between 1983 and 1987-88, unemployment rate of all kinds[1] for male workers declined in West Bengal, while it marked a general rise

for all India (Chandrasekhar 1993). Also it is evident that casualisation of male rural workers increased steadily for all India from 22 per cent in 1972-73 to 33.8 per cent 1993-94. But for West Bengal after an initial rise from 32.1 per cent in 1972-73 to 39.1 per cent in 1983, it marked a fall in 36.3 per cent in 1987-88 and to 35 per cent in1993-94 (Das 1997, Chandrasekhar 1993). The employment in non-agricultural activities under the Left Front rule increased as a result of growth and development of agricultural sector (Chandrasekhar 1993).

(v) According to the EGEPNP, agricultural wages tripled in West Bengal during 1977-78 to 1987-88, and the real wage increase in West Bengal was also among the highest in India (Sen and Sengupta 1995). A study by Jeemol Unni (1988) also revealed the fact that the real wage of agricultural labourers - for both male and female, was much above the national level in West Bengal for the year 1987-88. Jeemol Unni (1997) showed that for the adult male the percentage rise in real agricultural wage earnings at 1960-61 price level was 1.8 that was much above the national average 1.4. The rank of West Bengal was 3 here among 14 major states. Only Kerala and Punjab were the states ranked above West Bengal. The same for adult female labour is 1.6 against the national average 1.1. In this case the rank of West Bengal is 2. Kerala, the sole state remains in a position of above West Bengal. According to Sengupta and Gazdar (1998) between 1980 and 1991 the real wage of agricultural labour in West Bengal increased at the rate of 5.7 per cent per annum while in the all India level the same increase was 4.8 per cent. According to them during the same period the growth rate of agriculture in West Bengal and all India was 5.6 per cent per annum and 2.7 per cent per annum respectively. It can be said that the increase in real wage rate in West Bengal was consistent with the agricultural growth rate.

(vi) Education remained the constant source of criticism against the Left Front government by the public media. One can get an accurate rate of literacy by comparing the Census of India data for the period 1971 and 1981 and the latest figure given in the NSSO estimate for 1996-97. Looking into the Census figure we find that the percentage of literate population (above five years age group) in West Bengal was 48.6 in 19981 and it was improved into 57.7. The national average at the same years were 43.6 and 52.1 respectively. Therefore for both years 1971 and 1981 West Bengal's position was above the national average. Among the major states the rank of West Bengal was 5th in both periods. In the case of female literacy the percentages of West Bengal in 1981 and 1991 were 36.1 and 47.2 against the national average of 29.8 and 39.4 respectively. That means in the case of female literacy too West Bengal's position remained far higher than the national level.

Now let us look into the latest NSSO findings on literacy for the year 1996-97. According to the latter percentage of literate population in West Bengal was 72 while the national average was 62 per cent. Among the major states the rank of West Bengal was 4. Except the highest literacy rate in Kerala (93 per cent), only two states ranked marginally above the West Bengal, namely Assam (75 per cent) and Maharashtra (74 per cent).

(vii) It is a well-known fact that with the pace of economic and social development the people achieve higher level of consciousness, they follow the general practice of birth control and as a result birth rate comes down. At the same time the death rate and infant mortality rate come down owing to the improvement of the health facilities. The data given by the Sample Registration System give important trends regarding the same. In 1981, the birth rate in West Bengal was 33.2 per thousand population that was almost equal to the national average, 33.9. In 1991 the birth rate in West Bengal declined to 27 that was marginally below the national average of 29.5. The birth rates in rural areas in West Bengal and all India in the same period were 30.3 and 30.9 respectively. According to the latest data of 1998, the birth rate in West Bengal further came down to 21.3 while the same declined to 26.4 at the national level. The birth rate in rural areas was 23.4 in West Bengal and 28 at the all India in 1998. Considering the birth rate the rank of West Bengal among major Indian states was 8 in 1981. The same improved to 5 in 1991 and further to 3 in 1997. Let us look at the death rate. In 1981 the death rate in West Bengal was 11 per thousand people when the national average was 12.5. In 1991 it came down to 8.3 when the national average was 9.8. The rural areas exhibit a death rate of 8.9 and 10.6 respectively. In 1998 the death rate in West Bengal further came down to 7.5 and for the all India it was 9. In the same year the birth rate in rural areas in West Bengal and all India was 7.7 and 9.7 respectively. The rank of West Bengal was 8 in death rate in 1981 and improved to 6 in 1991 and remained unaltered at the same rate in 1997. Therefore the birth rate and death rate indicate a continuous process of economic and social change in West Bengal. The expectation of life at birth for West Bengal is 62.1 while the same at the all India level is 60.3 for the period 1991-95 and the rank of West Bengal was 7.

(viii) The data provided by the Sample Registration System shows that the Infant Mortality Rate (IMR) declined massively over time at the all India level and for West Bengal the rate of this decline is far higher than that for all India. In 1981 the IMR was 95 and 110 respectively for West Bengal and all India. In 1991 the same rates declined to 75 and 79 and in 1997 a further decline to 55 and 71. The rank of West Bengal among major states was 6 in 1981, which improved to 4 in 1991, but further deteriorate to 6 in 1997. Another point related to IMR is that at the all India level and in seven major states the IMR of females is much higher than that of the males. The presumption is that the girl child is neglected after birth, or in extreme cases they might be killed owing to the superstition that had been coming down through centuries. However, West Bengal maintained same level of IMR for males and females.

However no reliable official data are available for child nutrition. A. K. Sen and Sunil Sengupta conducted a survey on child nutrition in a few villages in Birbhum district of West Bengal in 1983. Sunil Sengupta and Harriss Gazdar conducted another survey on same households in 1988. According to them a remarkable improvement happened during these period regarding the child nutrition. Particularly 8 per cent children who suffered from disastrous undernourishment in 1983 had almost vanished in 1988 (Sengupta and Gazdar 1998).

NSSO 52nd round data publish figures on maternity and childcare. It is seen that percentage of mothers who are not attended by any trained person (not even midwife) at the time of childbirth in rural area is 14.5 in West Bengal and 35.8 in all India. The rank of West Bengal is 5 in this regard. At the rural area of all India the percentage of childbirth at the hospital or nursing home is 17.9, while the same for West Bengal is 23. The rank of West Bengal is 6 here. At the all-India level 41.1 per cent of pregnant mother in rural area registered their names for routined medical check up. The same figure in West Bengal is 61.1 per cent and the rank of West Bengal is 8 here. At the rural areas of India 45.2 per cent children are registered for regular medical check up and the same figure in West Bengal is 56 per cent. The rank of West Bengal is 6 in this case. However the percentage of mother received post natal care in West Bengal (22.4) is not at all impressive. It is just below the all India level (24.2). The rank of West Bengal is 12. Similarly in terms of the percentage of children of age group 0 to 4 never received BCG is marginally better in West Bengal (31.2) in comparison to the all India level (33) and rank of West Bengal is as bad as 12.

Population foundation of India has prepared three indices on the basis of some variables discussed above and calculated values for different states. These indices are Human Development Index (HDI), Gender Related Health Index (GHI) and Reproductive Health Index (RHI)[2]. It has been seen that West Bengal's value of HDI is 49 in comparison to 45 for the all India. The rank of West Bengal is 6. The value of West Bengal in GHI is 62 and in all India it is 51. The rank of West Bengal is 5 here. Considering the RHI, the value of West Bengal is 48 and the same in all India is 42. The rank of West Bengal is again 6.

The Panchayats as an Instrument of Local Self-Government in West Bengal

One of the main contributions of the Left Front Government is in respect of the revival of village institutions and their effective functioning. Before 1977, Block Level Administration was the main structure of the village administration. It was a purely bureaucratic institution, where the Block Development Officers used to have little idea of the local conditions. But in West Bengal along with the Block Level Administration the system of elected Panchayats was introduced in 1978. The bureaucratic Block Level Administration was now subordinated to the elected Panchayat. Since 1978 there has been regular elections at five years interval. The Panchayat system has three levels - Zilla Parishad at the district level, Panchayat Samiti at the block level and Gram Sabha at the grass root level covering on an average 10 villages. About 70 percent of the Panchayat members belong to the poor strata (mainly poor peasantry) and another 25 percent or so belong to the middle strata and the remaining 5 percent belong to the rich strata of the village population (Dasgupta, 1995). Recently 30 percent of the total Panchayat seats has been reserved for the female candidates. About half of the rural development budget and the amount allocated to various poverty alleviation schemes of the state are spent through the Panchayats at various levels. The Panchayats not only organise villagers for infrastructural developments, but also deal with most of the village level disputes apart from the disputes relating to wage rate and crop

sharing. Constitutionally the Panchayat has no judicial power, but people find it more convenient to settle their disputes through the Panchayat.

West Bengal agriculture has been transformed into a small farm economy following the agrarian reform in the state. The role of Panchayat is to organise this small farm economy so that the petty peasant production could have been stabilized. It might be presumed that the Panchayat is comparatively successful in this regard. We have shown earlier that for the last one decade or more the foodgrain production in West Bengal has registered a high growth rate, which is in fact the highest among all the Indian states. This has happened when there has been no corresponding growth of modern inputs like HYV, fertilizer, tractor or pump set (Sen and Sengupta 1995, Mukherjee and Mukhopadhyay 1995). The extent of farm mechanisation has been minimal in the state and has shown no massive increase in recent times. In fact Sen and Sengupta (1995) had shown that growth rate of modern inputs had declined from seventies to eighties in West Bengal. In this situation an unmeasured technological shifters were more important here. In other words the land reforms and Panchayat Raj (carried out in West Bengal but not elsewhere) caused an increase in productivity not found elsewhere. The Panchayat's role in organising petty peasant production has been evident when we observe that Panchayat takes active role in distributing the storage facilities for all households in a village or organising the small scale irrigation.

However, the weaknesses of the Panchayats are also phenomenal. The Mukherji and Bandyopadhyay Committee Report (1993) has indicated that the initial enthusiasm with the Panchayat has largely faded. The Panchayats are not much interested in mobilising local resources and to be financially self-sufficient. Rather they are functioning as agents of the State and the Central government. There were not much initiative made to form a strong co-operative movement. Such a co-operative could be economic wing of the Panchayat with which a second phase of agrarian reform may be started. (The problem of the co-operative we have discussed separately.) In the absence of any creative movement, Panchayats are now engrossed in routine work. There is a tendency towards 'localism' in which the Panchayat members give priority to their own villages over the welfare of the community at large (Dasgupta, 1995).

Similarly no active drive for literacy campaign was lodged on behalf of the Panchayat till the early nineties. The experience of all socialist countries that includ Vietnam or Cuba was that the respective Communist Parties never waited for the government fund to start literacy programme. But like the Communist Parties in other countries, no parties within the Left Front in West Bengal put any substantial effort to eradicate illiteracy. Nor the Panchayat was used for this purpose till the early nineties. Ironically, as it had been pointed out by Ashok Mitra (Desh-hitaishi, Autumn issue, 1994) the literacy campaign started in the state only when the Central Government released a special fund for this purpose. The existing number of schools and their working conditions are not adequate to bear the need of the hour.

Similarly no war was waged against the predominant gender discrimination in the rural Bengal. A thirty per cent reservation of total seats of Panchayats is of course a positive step. But any form of reservation may yield some result only when parallel efforts are made to empower the target class. But in rural West Bengal social abuses of Gender discrimination are very much prevalent, viz the system of dowry, sexual discrimination in job etc (Jayati Gupta 1995, Saswati Ghosh 1996). But the platform like Panchayat was not used to fight such evils.

Problems of Co-operatives

The prime problem of the co-operative movement in our country is that they are not at all self-sufficient in term of mobilization of resources. They are almost totally dependent on the fund provided by the Central Co-operative Bank. They lack the will, incentive and initiative to tap the local fund from promoting local production or deposit mobilisation. As we have mentioned earlier, Rabindranath Tagore pointed out about a century back that the co-operatives in our country are by and large confined to moneylending. The same tradition is going on even now. No other initiative comes up in rural Bengal from the Co-operative movement. In our sample not a single household is associated with the co-operatives in any connection other than borrowing of loans. Most of the co-operatives are dying with a huge burden of non-performing assets that had been coming down from a long past. The non-performing asset has not only cropped up owing to the non-repayment of the loan, but also from the direct plunder of the assets by the erstwhile directors of the rural co-operatives. The District Central Co-operative Bank does not let the PACS function unless the old debt (that has become non-performing assets) is cleared. In many cases the present directors are struggling hard to repay the old debt from the meagre profit that the co-operative could generate. A big obstacle is that the managers of the Co-operatives, who take the main burden of loan collection and other office job do not have any security of service. The bill for their permanence in job which has remained under consideration in the Central Co-operative Bank.

Political Economy of Agrarian Change in West Bengal : A Case of Class Differentiation with State Intervention

One must explain these changes in West Bengal vis-a-vis national level in proper theoretical perspective. In any market economic regime, the development of capitalist relations in agriculture brings out a process of differentiation of the peasantry. Lenin (1977) in his historic contribution 'Development of Capitalism in Russia' first published in 1899 developed his thesis of differentiation of the peasantry. Lenin refuted the contemporary populist Narodnik view that the peasantry was a homogeneous entity and any kind of impoverishment of the peasantry would lead to a collapse of the home market. Lenin showed

that capitalism was already the dominant tendency in the Russian countryside where the process of differentiation transformed the bulk of the old peasantry into two distinct classes - a rural bourgeoisie and rural proletariat. In Lenin's scheme, the differentiation of the peasantry comprised a process, which created a home market for capitalism where a large proportion of peasants were alienated from all means of production including land. The Narodnik's opinion was that since the process of emerging capitalism was accompanied by a process of impoverishment, it may lead into a collapse of the home market by restraining the purchasing capacity of the large mass of the peasantry. Lenin laid bare the fallacy of the argument by showing that though with the emergence of the capitalist relation people were consuming less but they were forced to buy more owing to the dominance of the money, market and exchange relation. In this way peasant class differentiation creates a home market for capitalism.

Like any market economic regime, West Bengal's agrarian economy also experienced a rapid class differentiation with the advent of advanced technology. This does mean a greater concentration of ownership in the structure of asset, irrigation, output and product marketed in the hands of a few belonging to higher economic classes. The lower economic classes that are large in number, under unrestricted operation of the market, are increasingly losing control over the means of production and pushed back into the ranks of the proletariat. However, West Bengal is a unique case of class differentiation under state intervention, which is a pro-poor intervention. The limited agrarian reforms in West Bengal, by moderating the effects of the market, have had a positive impact on the economic condition of the poorer classes. Such a pro-poor intervention helped to stabilise the petty peasants' production. It has helped to stop the market-led process of immiserisation and has made differentiation itself more broad based-giving an upward impetus to more people. But these positive changes are not sufficiently strong to stop the process of differentiation altogether or to alter the concentration of means of production in the hands of a few. Despite the implementation of a successful agrarian reform programme, the agrarian economy of West Bengal has experienced an acute process of differentiation of the peasantry. In other words, the differentiation of the peasantry is still going on, based on command over resources by a section of exploiter class. Therefore we can expect a consistent pattern of the distribution of assets, lands, irrigation and credit which are likely to be biased towards higher economic classes.

In Table 1 the Gini co-efficients for the distribution of different variables among size classes/ asset groups that represent the productive capacity or the means of production are given. The figures are drawn from the NSS 48th round, the reference year for which is 1991-92. It has been seen from Table 1, West Bengal registers much less inequality in distribution of the variables like assets, land, irrigation, credit etc. in comparison with India as a whole.

Table 1

Value of Gini-Coefficients for Variables representing Productive Capacity in 1991-92: West Bengal and India

Variables	West Bengal	India
Assets (Non Land)	0.570	0.621
Owned Land	0.503	0.652
Operated Land	0.434	0.588
Irrigation	0.472	0.543
Outstanding Credit	0.403	0.398

It should be mentioned in clear terms that no radical redistributive land reform has taken place in West Bengal, without which no fundamental changes can be possible. The land reform which has been carried out in West Bengal is a limited one, defined by adherence to the fundamental right to property in the Constitution. In this sense the Left Front has successfully implemented the Congress programme of land reform and not its own programme. The latter are concerned with the radical redistribution of cultivated land by revolutionary means and a destruction of the rentier class, the jotedars. Such a radical redistribution continues to remain a declared task of the Left in India. Such a radical redistribution did take place in Russia after the 1917 October Revolution. But in Lenin's analysis this simply laid the basis for a democratic and wide-based process of peasant differentiation, rather than the narrowly-based process of landlord oppression (Lenin, 1970; pp. 486-87). Particularly in a situation like that in West Bengal even when the percentage of hired workers might be declining, in Leninist concept, the differentiation might still be going on in terms of increasing command over assets, output, labour and marketed product in the hands of a minority developing into capitalist farmers (Lenin, 1960; pp. 97-99, Kautsky, 1988; pp. 165-166). Therefore the national trend of the peasant class differentiation cannot be stopped in West Bengal, as long as West Bengal continued to be operated under the same national economy and the same Constitution.

The process of agriculture-led development mentioned above has taken place in West Bengal in consequence of the commitment of the Left Front government to actually implement every legal provision of the limited land reform programme. As we have seen land reform has been characterised by the registration of bargadars giving the effective security of tenure and the acquisition and effective distribution of the ceiling surplus land, implementation of minimum wages for labourers through strong trade union action and curbing of the worst abuses of the jotedar system. The poorer peasants and the labourers have been given power to some extent through their representation in elected Panchayats. All this represents a substantial achievement towards democratisation within the existing

overall constraints. It has made differentiation more broad based and has helped to prevent the immiserisation of the labourers and the poor seen in most other parts of India.

Conclusions :

This study seeks to analyse the process of rural reorganization and rural development in a differentiated economy of West Bengal during the Left Front rule. Like any market economic regime the development of capitalist relation in agriculture brings out a process of differentiation of the peasantry in the agrarian economy of West Bengal. However the differentiation of the peasantry in West Bengal is associated with a process of a strong pro poor state intervention. As a result the nation-wide process of immiserisation has been halted in West Bengal and the process of differentiation has become more broad-based. It had initiated a process of agrarian growth and rural development. The particular process of Panchayat Raj and rural reorganisation has been analysed with care. At present the Panchayat Raj in West Bengal has been able to break the 'agrarian impasse', but it has a big failure so far to initiate the second phase of agrarian reform on the basis of co-operative movement, literacy campaign and gender equality. A sustainable rural development can be achieved only when such a second phase of agrarian reform is initiated.

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Notes :

1. Usual Status Unemployment Rate (USUR), Current Weekly Status Unemployment Rate (CWSUR) and Current Daily Status Unemployment Rate (CDSUR)

2. The Human Development Index (HDI) is a composite index to measure development of the human capabilities that tries to combine life expectancy, educational attainment and income. Population foundation of India (PFI) has prepared the HDI for 16 major states in India on the basis of UN reports. The Gender Related Health Index (GHI) tries to measure the narrowing gaps between the males and females through some set of basic capabilities. PFI had prepared this index in the line of gender related development index (GDI) computed by the UNDP. This is an index that measures the extent of congruence between male and female values in terms of expectation of life at birth, adult literacy rates, middle school enrolment ratios and infant mortality rates. The following seven parameters have been identified to measure reproductive health. These are (i) Total Fertility Rate (TFR), (ii) Age specific fertility rate in the age group 15-19 (ASFR 15-19), to represent teen age fertility, (iii) The proportion of higher order births i.e., order 4 and above (B4+), (iv) Percentage couples effectively protected by contraceptives (sterilisation), (v) Perinatal mortality rate (PNMR), (vi) Proportion of births receiving skilled attention (SKAB) at the time of delivery and (vii) Educational attainment of Women (EAW).

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