An Assessment of Rubber Producers' Societies, (Self Help Groups of Small Growers) in the Rubber Plantation Sector in India

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The Indian Rubber Plantation Sector is dominated by smallholdings which account for almost 87% of the production and area. The pre-ponderence of smallholdings make the sector vulnerable to violent fluctuations in price, exploitation by middlemen etc. To overcome these difficulties and strengthen the sector, a strong extension support is required. The extension support now available is inadequate to reach out to a million small growers. Therefore, a group management system has been promoted by the Board by encouraging formation of voluntary organisation in line with the Self Help Groups namely the Rubber Producers' Societies (RPS's). About 2000 such RPS's have been formed in India since 1985. An assessment of the performance of these Societies has been made since there is wide variation in the level of performance of these RPS's. The study revealed that there has been considerable impact of the RPS's on the production and productivity of rubber and the quality of life in general of the rubber small growers. In the service area of the good RPS's the members derived more benefits as evidenced by the data generated in the study and discussed in the paper. RPS also helped the growers to have better access to technical information and could maintain better liaison with the Rubber Board. The paper discusses factor analysis of the 3 types of RPSs relating to the Board of Directors, members and other stakeholders in a bid to quantify the impact of each of these on the performance of RPS. The study also revealed that the performance of the Board of Directors has a great bearing on functioning of the RPSs. As the Rubber Board of India is proposing to decentralise extension functions and involve voluntary associations of the growers in the development programmes, the study is very relevant as this would help in adopting strategies to strengthen the institutional linkage at the grass root level to empower and modernise the smallholding sector.

Keywords: Board of Directors, decentralisation, development, extension, grass root level organisation, rubber producers' societies, smallholding sector.

The Indian Rubber Plantation Sector is dominated by small holdings which account for almost 87% of the production. Of the one million holdings only 323 are classified as

estates(>20 ha). The average size of the small holdings which was 1.3 ha in 1955-56 has come down to 0.49 ha during 1996-97 (Krishna Kumar & Nair, 1997). The preponderance of the small and marginal growers makes the sector vulnerable to exploitation by middlemen fluctuations in price and also experiences difficulty in gaining access to technology and information. This particularly is relevant when the extension support is inadequate. In India. the ratio of extension workers to small rubber growers is more than 1:3000. The concentration of extension efforts in general has been in the immature phase, Practically very little support could be extended during the mature phase when critical operations namely. tapping, processing and marketing in addition to management inputs in the plantation (by adopting various productivity enhancement measures) are to be taken up. Due to various constraints, strengthening of the extension set up by increasing the manpower is not possible. Considering that the share of small holdings in production of NR has been increasing, from about 30.3% of the total production from holdings below 2 hectares during 1955-56 to about 71% during 1998-99 (The Rubber Board, 1999) the need for an alternate mechanism to support the small holding sector is necessary and a group approach therefore had to be adopted.

The principle of co-operation was recognised since Vedic days in India and the concept in the present form was introduced with the Co-operative Credit Society Act of 1904 (Supe,1994). The Co-operative Society is an association of an unlimited number of persons formed on the basis of equality for the promotion of members' interests and managed by the members themselves. The Rural Credit Survey Committee report by the Reserve Bank of India 1954 recommended an integrated scheme of rural credit involving three fundamental principles viz.

- (i) State participation at different levels,
- (ii) Co-ordination of credit with other economic activities, and
- (iii) Administration through trained and efficient personnel.

The National Development Council, in 1959 (Supe, 1994) recommended organisation of co-operatives on the basis of village community and to stress on increasing agricultural production. This led to organising large sized societies like Service Co-operatives which were expected to cater to the needs of the farmers on aspects such as credit supply for inputs etc.. The need for a group approach in the rubber sector was recognised long time back and the Plantation Enquiry Commission of 1960 recommended formation of co-operatives and the Rubber Board started promoting Rubber Marketing Societies from 1960. Even prior to the formation of Rubber Marketing Societies the rubber growers have had experience in being members of Co-operative Societies. Studies (Haridasan & Pillai, 1991) revealed that 52% of the members of the Co-operative Societies in the state of Kerala were rubber growers and these growers occupied 80% of the official position. The Rubber Marketing Societies

acted as a vehicle for transfer of technology besides distribution of agro-inputs, community spraying of fungicides for leaf disease control, processing and marketing of rubber. The membership grew considerably and this started affecting the character of this extension organisation which began getting more formalised with more bureaucratic controls and an authoritative approach was gaining precedence over participative approach. Participative approach is ideal for an extension organisation (Rogers & Sehoemaker, 1971). The situation led to the distancing of the rubber growers from the Co-operative Societies and the voluntary nature of these Societies was eroding and thus the Marketing Societies could not play an effective role in transfer of technology.

To overcome this shortcoming the Rubber Board of India promoted voluntary organisations of small growers *viz.*, the Rubber Producers' Societies (RPS) from 1985 onwards. The concept was very much similar to the Milk Marketing Societies formed in Gujarat which achieved high degree of success. The RPSs were formed more or less in line with the concept of the self help groups and these were registered under the Charitable Societies Act helping them to maintain the voluntary character to the maximum extent.

Empowering the small grower and involving him in various critical areas of the plantation sector, such as processing and marketing, is vital for the sustenance of the industry. As a second stage of development of the RPS, the Rubber Board promoted formation of private limited companies with the RPSs contributing 49 shares (98%) and the Rubber Board contributing one share.(2%). This is aimed at helping the small growers to have a say in the processing and marketing of rubber which are capital intensive ventures and which cannot be achieved by the smallholders themselves without initial Government support. The arrangement is important, for besides helping the modernisation of smallholding sector it ensures a fair price and avoid the possibility of exploitation.

Currently there are about 2 000 Rubber Producer Societies. The attempt, a pioneering one in the natural rubber production sector, undoubtedly has made a significant impact in the rubber smallholding sector in the country. In a study conducted in 29 villages in a predominant rubber growing tract in India (Krishna Kumar & Nair, 1999) it has been observed that 33.14% of the growers are members of these Societies and on an average there are three RPSs per village. The RPSs have also been playing a vital role in providing assistance of various kinds to growers. Twenty-seven percent of the growers in the study reported that they have been getting technical information from RPS. Though their performance has been satisfactory it is realised that there is scope for a considerable amount of improvement as all the RPSs have not been exhibiting uniform level of performance. While the performance of about a third of them can be rated as good, almost 30% of them are not functioning satisfactorily. The Board proposes to devolve extension and development functions in a phased manner to these grass root level voluntary associations to promote people centered

development at the grass root level which ultimately is aimed at the prosperity of the rubber growers.

A study therefore, was carried out to analyse the reasons for the varied performance among the RPSs so as to provide information for evolving appropriate strategies to support these groups besides making an assessment of the impact of the RPSs in the rubber small holding sector.

OBJECTIVES

The study was taken up with the following objectives:

- To analyse the organisation structure and management procedure of RPS and to identify factors influencing them.
- To identify constraints and suggest remedial measures.
- To analyse factors responsible for success of good RPSs.
- To assess impact of the RPSs on the production and productivity levels of member small growers vis-a-vis non-members.
- To evolve strategy for promoting farmer participatory extension management system.

METHODOLOGY

The Rubber Producers' Society (RPS) is a grass root level organisation of small growers aimed at economic and social development of rubber growers through a variety of activities. The membership is open to the rubber growers in the area of operation which is normally a radius of 1-2 km, and to those who agree to market the latex and field coagulum through the Society. The RPS has a President elected by the General Body and the President who holds office for 3 years conducts election of the 6 committee members, two of whom will retire every year. The management of the Society is vested with the Executive Committee. Funds for the Society is collected through an admission fee, annual subscription, donation, loan, subsidies and advances from members, banks, financial institutions, Rubber Board and the Government.

The study adopted an exploratory approach to unearth theoretical concepts and hypothesis aimed at gaining familiarity with substantive area of institutional effectiveness at the grass root level. This approach was also necessary since the literature available was scant. The study advocated Grounded Theory Approach (Glaser & Strauss, 1967), and Open System Theory (Katz & Kahn, 1966) and was descriptive and analytical in nature and relied on the advantages of compiling qualitative and quantitative methods. Eighteen representative RPSs falling into the three categories namely, good, average and poor representing three rubber

growing zones in the major rubber producing state of India, Kerala, were chosen for the study. The respondents in the study were Board of Directors, members of RPS, collection agents, tappers, extension officers of the Rubber Board, and non-RPS members. The study was conducted by the Indian Institute of Plantation Management as a part of the consultancy work awarded to them by the Rubber Board. The total sample size consisted of 36 Members of the Board of Directors, 90 members of RPS's, 51 non members, 20 tappers, 7 Collection Agents, 12 Extension Officers and 6 nonmembers. The data were collected through surveys adopting People Participatory Approach (PPA) and Participatory Rural Approach (PRA). Two types of survey instruments viz., Quantitative and Qualitative were designed. The data were analysed using content, Item Analysis and Structural Analysis.

RESULTS AND DISCUSSION

The study reveals that effective functioning of RPSs needs increasing competence of the Board of Directors, and though many of them possessed technical skill to manage their own farm, the skill they possessed on managerial and human resources dimension was very limited. The most important factors bearing on the performance of Board of Directors and the percentage variance were:

- Personal capacity building (skill in public speaking, community issues, interagency co-ordination).
- b. Popular participation and co-operation (ability to co-operate well with members).
- Commitment for innovativeness, skills related to fund raising, and grass root development process.
- d. Attention and skill in politics, selected issues and fund mobilisation.
- e. Knowledge on technical and organisational aspects.
- f. Level of education, and
- g. Professional contacts in mobilising funds.

Factor Analysis for the Board of Directors (BOD) (for the three types of RPSs considered together) are given in *Table 1*.

Though a positive correlation was observed between the level of education and effective performance of the RPS, descriptive analysis suggests that the level of education of BODs across the three types of RPSs had a negative influence. Higher the level of education of BODs, lesser was the performance of BOD as office bearer which is not surprising since most of the small growers with higher educational status were not fully dependent on plantation activity. Effect of income level on the performance of the RPS was inverse. In well managed (good) RPSs, Board of Directors had high level of innovativeness (67%). In respect of mobilising funds for the RPSs, professional contacts helped to the extent of 81

TABLE I: FACTOR ANALYSIS FOR BOARD OF DIRECTORS (OVERALL FOR 3 TYPES OF RPS) (HIGHEST FACTOR LOADINGS FROM ROTATED COMPONENT MATRIX)

Variables	Correlation
F1 Personal capacity building	
Ability to speak effectively in public	0.739**
Confidence in participating public affairs	0.721**
Experience in community life	0.633**
Integrating different agencies operating in the district	0.584**
F2 Skill in popular participation and co-operativeness	
Co-operativeness of BOD's with members in respect to functioning of RPS	0.829**
Efforts to involve others in public affairs	0.753**
F3 Self commitment for innovativeness, fund raising and RPS development	
Commitment to life priorities	0.731**
Networking RPS with other organisations and its leaders	0.726**
Rate of innovativeness of BOD	0.568**
Skill in mobilising funds through political contacts for RPS	0.445**
F4 Attention and skill in politics, issues and fund mobilisation	
Political help for overall functioning of RPS	0.776**
Attention on selected problems and issues at local level	0.615**
Skill in mobilising funds through political contacts for RPS	0.430**
F5 Knowledge on technical and organisational aspects	
Technical training from Rubber Board	0.705**
(production of good quality sheet, disease control)	
Experience as office bearer/member in other organisations	0.669**
Functional linkage of RPS with other organisations	0.585**
(Private, Government and Voluntary)	
F6 Level of education and degree of involvement	
Education level	0.822**

percent while the help from political contacts was very low. The previous experience of the Board of Directors also contributed to the effective performance. Factor Analysis for good RPS's is presented in *Table 2*.

The analysis of the data based on the component co-efficient of the skill of Board of Directors (BODs) in poorly managed (poor) RPSs revealed that the following negative

TABLE 2: FACTOR ANALYSIS FOR BOARD OF DIRECTORS - GOOD RPS (HIGHEST FACTOR LOADINGS FROM ROTATED COMPONENT MATRIX)

Variables	Correlation
F1 Organisational and marketing skill	
Networking RPS with other organisations and its leaders	0.975**
Skill in mobilising funds through political contacts for RPS	0.898**
Rate of innovativeness of BOD	0.877**
Marketing linkage with private, voluntary and governmental organisations	0.676**
F2 Skill on needs identification	
Skill to identify RPS members needs and interests	0.895**
Conduct meetings with villagers to discuss local needs and problems	0.713**
F3 Organisational experience as officer bearer	
Experience as office bearer/member in other organisations	0.949**
Contribution of organisational experience in increasing personal contacts	0.771**
F4 Leadership skill	
Leadership ability	0.878**
Relation between financial soundness and getting the position as BOD	0.565**
F5 Confidence in public affairs, activities and innovativeness	
Confidence in participating public affairs	0.939**
Sense to make difference in the community	0.614**
F6 Skill in building organisation and fund raising	
Skill in generating funds for RPS	0.924**
Skill in building rural organisations	0.535NS
F7 Leaders with high income	
Relation between financial soundness and getting the position as BOD	0.335NS

variables got the highest rating (Table 3):

- · BODs' leadership skill,
- · Limited or no skill on how to form and manage RPS,
- · No marketing linkage to provide voluntary or Government organisations,
- · Overall dissatisfaction of the BODs with RPS, and
- · Limited skill of the BODs in mobilising funds for RPS development,

The data (Table 3) suggests that there is need for building up of awareness among the

TABLE 3. FACTOR ANALYSIS FOR BOARD OF DIRECTORS - POOR RPS (HIGHEST FACTOR LOADINGS FROM ROTATED COMPONENT MATRIX)

Variables	Correlation
F1 Organisation skill	Correlation
Skill in generating funds for RPS Efforts to involve others in public affairs Skill in building rural organisations Skill in mobilising funds through political contacts for RPS Sense to make a difference in the community	0.776** 0.773** 0.763** 0.709** 0.676**
F2 Leadership effectiveness	
Leadership Functional linkage with other organisations (private, voluntary, government) Experience as office bearer/member in other organisations	0.902** 0.785** 0.723**
F3 Skill in assessing needs and inter-agency linkage	
Skill to identify RPS members needs and interests Integrating different agencies operating in the district Conduct meetings with villagers to discuss local needs and problems	0.882** 0.834** 0.617**
F4 Innovativeness and public affairs skill	
Confidence in participating public affairs Rate of innovativeness of BOD	0.912** 0.820**
F5 Networking skill	
Networking RPS with other organisations and its leaders	0.961**
F6 Membership in developmental organisation	
Number of organisations in which BOD has membership	0.829**

members themselves for choosing/electing the right type of BODs and also BODs need to be given training in the various factors mentioned above for building up their skills.

Ten institutional values (factors) identified as important for the RPSs and these are given in Table 4.

With regard to smallholders becoming members of RPS's, 47.8% of the members took membership with a view to gaining knowledge on production, whereas 36.7% became members for ready access to details of subsidies, and schemes of the Rubber Board *etc.*. It has also been revealed that members of the RPSs had better rapport with the extension officers of the Rubber Board in the field. Eighty percent of the respondents in good RPSs

TABLE 4. FACTOR ANALYSIS FOR MEMBERS (ALL 3 TYPES OF RPS) (HIGHEST FACTOR LOADINGS FROM ROTATED COMPONENT MATRIX)

Variables Variables	Correlation
1 Service mind and readiness of the Community	
ensitiveness of the community to others needs and problems	0.696**
confidence of the community in serving fellow Citizens	0 687**
nthusiastic about the sense of belongingness to Community	0 648**
ersonal motivation and determination of the Community to change	0.612**
ssertiveness of the community in solving Social problems	0.570**
2 Awareness and satisfaction	
ources consulted to obtain marketing knowledge (Private merchant, RPS, Newspaper)	0.709**
etting opportunity to explore things up to satisfaction	0_645**
nproved quality of life and career	0.611**
3 Participation in meetings	
enefits obtained from RPS meetings (Technical, subsidies and schemes from Rubber Board	1) 0 840++
egular attendants in the meetings	0.677**
entifying fund raising projects for RPS	0.628**
Commitment towards functioning of RPS	
ommitment of members towards functioning of RPS	0.790**
vailability of working capital	0.486**
5 Purpose to become member	01100
othing lost being a member of RPS	0.001**
ttention paid to rubber related issue at local level	0.801**
Level of education and degree of contact	0.015
ducation level	
	0.837**
ources consulted to obtain production knowledge (Rubber Board, Field Officer)	0.597**
	0.553**
Board of Directors's skill on conflict management (members perception)	
pility of BODs to resolve disputes and non-co-operativeness among members	0.702**
Availability of infrastructure	
vailability of collection centre	0.726**
vailability of infrastructure (Office building)	0.581**
Institutional linkage	
stitutional linkage with small scale industries (factories) and banks for marketing d financial help	0.657**
O Political, advisory and market assistance	
litical force helped a greater extent in the functioning of RPS	0.762**
ientific/technical help from Rubber Board (Training, demonstrations)	0.762**
etter marketing facilities financial assistance through institutional links	0.472** 0.467**
ientific/technical help from Rubber Board (Training, demonstrations) tter marketing facilities, financial assistance through institutional linkage	0.47

contacted Field Officers for technical information, whereas only 60% of the respondents of the poor RPSs reached extension officers. Further 50% of the members of the poor RPSs relied on private merchants for marketing, whereas only 18% of the good RPSs approached private merchants to marketing their produce.

One of the striking results of the study has been with regard to the impact of RPS to increase production, improve quality of life and attention to general rubber issues related to rubber sub sector. Seventy percent of the members of good RPSs achieved high production whereas only 26.3% of the members in poor RPSs could gain high productivity. About 56.7% of the members of the good RPSs felt that the quality of life improved after becoming a member of the RPS, whereas only 10% of the members in poor RPSs felt that their quality of life was improved. More than 80% of the members in the good RPSs felt that the attention they paid to rubber related issues at village level had increased substantially, whereas this was only 15% for the poor RPSs. Three factors were observed to be influencing members readiness in participation in RPS activities. The major factor was the ability of RPSs in providing technical information on rubber production. A second factor was the felt need of the members to support RPSs so that they exist and the third was for getting direct benefit; the weightage for the above three features were 46, 35 and 28% respectively.

A member of the RPS was made the Collection Agent, and assigned with the job of attending to the day to day marketing operations provided a vital link in the RPS. Analysing the views of the Collection Agents, the study revealed that even in the good RPS selected, 67% of the Collection Agents were not satisfied with the job and the figure was 100% for the poorly managed RPS. The Collection Agents felt that better infrastructure for processing and marketing, if provided can sustain the RPSs. In poor RPS the Collection Agent had only a monthly income of Rs. 100 to 500, whereas in the good RPSs, the income level was more than Rs. 1 000/- per month.

The tappers from all the three types of RPSs, namely, good, poor and average had a high school level of education. Fifty-eight percent of the tappers had an income range of Rs. 500 to 1 000 per month in poor RPSs. In good RPSs, 90% of the tappers had functional association with the RPS whereas this is only 33% in poor RPS.

An analysis of the data on the perception of Field Officers indicated that they needed more training in the managerial aspects of grass root institutional building and management, conflict management, morale and self confidence building and community development. Hitherto the thrust has been merely on the technical aspects of rubber production and a change is felt needed.

A profile of non-members of the RPSs from the service area of the RPS also was collected. Forty-seven percent of the non-members selected at random had income

between Rs 5 000 and 10 000. The reasons given for the farmers not taking membership in the RPSs include:

- · Lack of awareness about the functions and benefits of RPS,
- · RPSs not involved in rubber sheet trading,
- Advance payment is available from private dealers, whereas RPSs cannot provide advance payment,
- · Delayed payment through RPS, and
- Ineffectiveness of the BODs

The non-members however desired to take membership in the RPS.

CONCLUSION

The study was aimed at a critical analysis of the good, average and poorly performing RPSs in a bid to identify factors which have contributed to the varied performance of the RPSs. The important stakeholders were contacted and the views obtained and analysed. The stakeholders ranging from the President of the RPS to the tapper in the locality are of the firm belief that RPS can contribute substantially to the well being of the rubber sector and substantial progress has been achieved in the sector by this movement. However, to bridge the gap between the poor performing and good performing RPSs, there is a greater need to identify the critical factors and evolve a mechanism to overcome the shortcomings. The Board of Directors has been identified as the most critical component in the RPS. Extra effort has to be put in by the Extension Machinery of the Rubber Board to evolve human resource development programmes aimed at supporting the RPSs to a level of sustainability. There is also a need for improving awareness among the members about the prospect and potential of the grass root level organisation and its relevance to the sector. Mechanisms have also to be evolved to build up infrastructure and institutional linkages to make the system a sustainable one. As the Indian rubber sector is predominated by the smallholdings, (87% of the production coming from holdings with half hectare or less), there is an urgent need to improve the quality of the produce and to ensure a fair price. Group action is required not only for community processing and marketing but also for ensuring effective transfer of technology. In the wake of the globalisation, when the small holding sector has to compete with the international market, this arrangement becomes exceedingly important.

It is further felt that the current findings and experiences in the Indian rubber smallholder sector may be applicable to other major rubber growing countries as even in these other countries, smallholdings predominate the rubber production sector.

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REFERENCES

- GLASER, BARNEY and STRAUSS, ANSELM. 1967. The Discovery of Grounded Theory, Strategies for Qualitative Research, Chicago: Aldine.
- HARIDASAN, V and RAMACHANDRAN PILLAI, K K. 1991. Role of Co-operative Society as the Nodal Point in the Dissemination of Scientific Knowledge on Rubber. *Journal of Plantation Crops*, 18, 395 – 398.
- KATZ, DANIEL and KAHN ROBERT, L. 1966. The Social Psychology of Organisations. John Wiley & Sons, Inc., New York, 452 – 453
- KRISHNA KUMAR, A. K. and MADHAVANKUTTY NAIR, P. M. 1997. Technology Transfer An Indian Experience. Paper presented at the International Seminar on Modernisation of Rubber Small Holding Sector – ANRPC, Pedang, Indonesia, July 1997. Preprint.
- KRISHNA KUMAR, A. K. and MADHAVANKUTTY NAIR, P. M. 1999. Transfer of Technology in the Indian Rubber Plantation Sector. *Indian Rubber Journal*, 44,130-139.
- ROGERS, E. M. and SHOEMAKER, F. F. 1971. Communication of Innovations. The Free Press, New York.
- RUBBER BOARD. 1999. Indian Rubber Statistics. Rubber Board, Kottayam, Kerala, India. 23, pp 10 and
- SUPE, S. V. 1994. An Introduction to Extension Education. Oxford and IBH Publishing Company Pvt Ltd. 149-150.