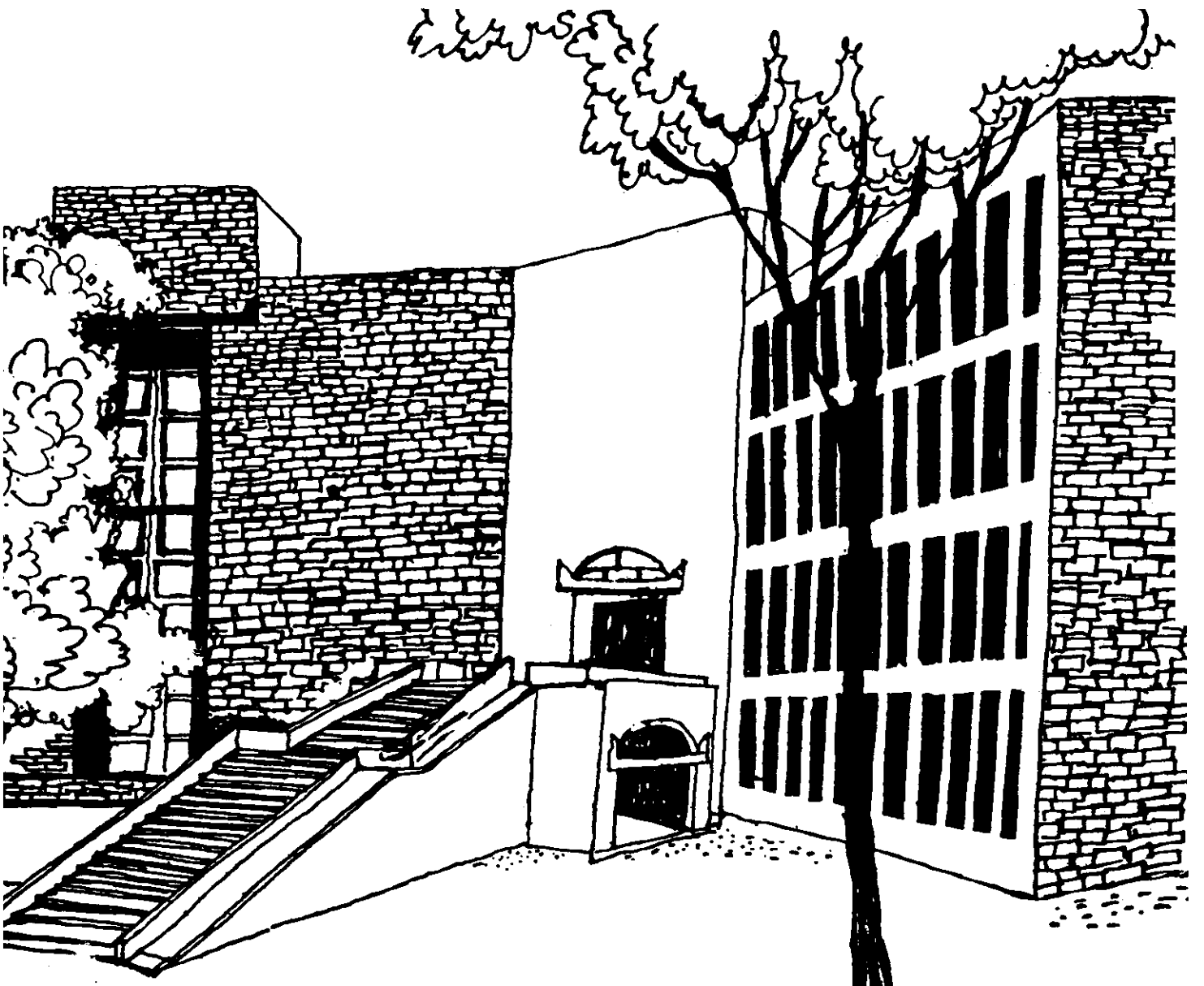




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Working Paper



COMPARATIVE PERFORMANCE OF FARMERS' SERVICE
SOCIETIES AND PRIMARY AGRICULTURAL
COOPERATIVE CREDIT SOCIETIES

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Abstract

This paper analyses performance of Farmers' Service Societies (FSS) and Primary Agricultural Cooperative Credit Societies (PACS) comparatively. Features of these two field-level rural financial institutions (RFIs) are described in Section-II. Section-III conceptualizes performance criteria. Section-IV discusses application of these criteria and analyses the empirical results. Major conclusion of the paper is that FSS have performed better than PACS. But both these RFIs have not succeeded in undertaking agro-marketing and processing. Implications of these findings are discussed in the last section.

COMPARATIVE PERFORMANCE OF FARMERS' SERVICE
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I. Introduction

This paper analyses performance of farmers' service societies (FSS) vis-a-vis primary agricultural cooperative credit societies (PACS). Since both FSS and PACS are cooperatives, their objectives include not only their viability but also well being of their members and development of the society at large. Thus, performance of these farmers' organisations must be evaluated at two levels, namely, organisation level, and members level. This requires collection and analysis of data for both these economic units. This paper analyses data of the organisation only. However, criteria adopted for this analysis are such that they also permit drawing performance implications from the standpoint of members.

Performance of FSS and PACS is comparatively studied because institutional innovation of FSS was conceived as PACS were unable to be multipurpose in their functions and also by-passed the weaker sections like agricultural labourers, marginal farmers, small farmers and artisans.

Past studies on FSS covered early and short period of their working. Some of these studies found that (a) dependence of the members of FSS on informal lenders had declined[3], (b) growth in

membership of weaker sections had steadily improved[9], and (c) recovery/collection of loans advanced was higher[8], and [9]. Some other studies revealed that FSS did not have (a) qualified technical and managerial personnel[7], and [6], (b) long-term and consumption credit in their lending portfolio[6], [7] and [8], and (c) multi-functional structure of their operations[6]. Most of these studies concluded that FSS was not much different from PACS. Even the policy support of FSS receded on a common belief that this institutional innovation had failed. These conclusions need to be reevaluated as they suffer from methodological and conceptual weaknesses related to performance criteria which will be discussed in the third and fourth sections of this paper.

In the next section basic features of FSS and PACS are discussed. In the third section performance criteria are conceptualized. Fourth section discusses the results of application of these criteria. And in the final section conclusions are recapitulated and based on that policy implications are drawn.

II. Features of FSS and PACS

Both these field-level rural financial institutions (RFIs) have been introduced to extend credit that is integrated with modern inputs and commodity markets related services. They have been introduced also to improve rural poor's share in formal credit, and to organize a force to counter the usurious power of village money lenders. They have been chosen for both economic and non-economic reasons. But there are important differences in the emphasis attached to these factors.

PACS came to be organized after the enactment of Cooperative Credit Societies Act in 1904. This Act was subsequently revised in 1912 to promote multi-purpose cooperatives and to organize non-credit cooperatives. But starting of multi-purpose cooperatives did not receive momentum until the Reserve Bank recommended them in 1937 and until Five Year Plans provided state support for them. Moreover, it was emphasized that unless credit was organized on a group basis, virtues of self-help, thrift, and modernized attitudes that are necessary to deal with the local money lenders could not be promoted. As experience with such group organization was gained, it was realized that credit integrated with other services by the multi-purpose cooperatives would be in a better position to counter the moneylender-cum-traders. Features of administration by honorary management and local participation, unlimited (and subsequently limited) liability of the members, small (and subsequently moderately large) size, and simple operations of these cooperatives were to help reduce costs and risks of rural finance operations. These cooperatives were also to receive state partnership in both equity-capital and administrative leadership.

By early 1970s it was found that these multi-purpose PACS had not much succeeded in diversifying their operations especially commodity marketing and processing, in reaching the weaker section, and in becoming viable. For these reasons, among others, the National Commission on Agriculture recommended introduction of farmers' service societies (FSS). The main

features of this recommendation were that (1) FSS unlike PACS will have a compact area of operations in 10-20 villages (instead of 5-8 villages for PACS) with a potential of reaching a business of Rs.2.5 to 3 million (instead of Rs.0.2 million for PACS) in 3 to 5 years, (2) FSS unlike PACS will have branches and such FSS may even reach the business of Rs.10 million in 5 to 7 years, (3) FSS will have an overall strategy of agro-based development for the area to utilize land and manpower, (4) FSS membership will be more oriented to the hitherto neglected weaker sections of the rural population, (5) FSS management will also be represented by this section, (6) FSS will undertake both credit and non-credit (including agro-processing) operations, (7) FSS will be a self-paying proposition in the sense that it will meet all its costs within a reasonable period of time, (8) FSS like PACS will be an integral part of a three-tiered cooperative credit organisation when sponsored by state cooperative banks, (9) FSS will be a cooperative organisation even when it is sponsored by the commercial banks, and (10) FSS will have adequate and properly trained managerial and technical personnel. First FSS was promoted in mid-1970s. Since then by early 1980s there have been over 2500 FSS. First PACS was promoted in early 1900s and since then by early 1980s there have been about 92000 PACS.

Thus, FSS as compared to PACS has three distinct features. These are (a) FSS is a much larger sized field-level RFI, (b) it has wider scope of operations, and (c) its membership and management

is relatively more from the weaker section.' Some more specific features of these two cooperatives are given in Table 1.

III. Performance Criteria

From the preceding discussion it appears that four organisational principles have been followed in promoting FSS. These are (a) vertically integrated organisational structure from local to regional to state/national level (also applicable to PACS to some extent), (b) higher density of field-offices of FSS, (c) larger coverage of clients with specific focus for the weaker section, and (d) multi-functional structure of operations which are horizontally integrated (also applicable to PACS to some extent). This is graphically shown separately for FSS and PACS in Diagrams 1 and 2.

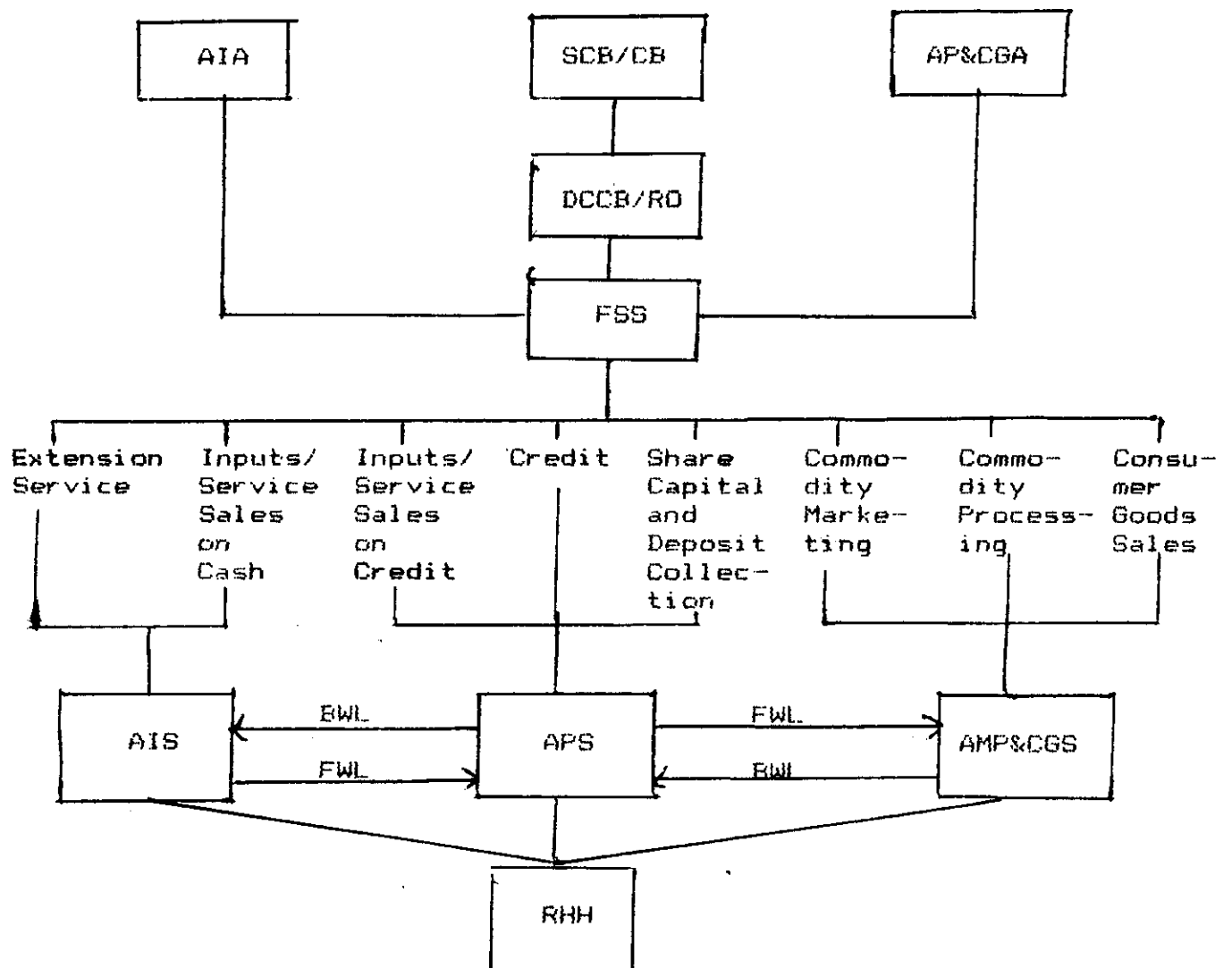
Each of the four organising principles has implications for the benefit of both the organisation (i.e., FSS and PACS) and its members (i.e., RHH). For example, vertically integrated organisational structure of a RFI will have better capability to integrate regional and national level financial markets, provide managerial guidance to its lower level units, enable it to arrive at more interactive understanding for strategic decisions, and also decentralize implementation process. Similarly, higher density of field-branches of a RFI improves accessibility for both the organization and its clients, enables intensifying and widening the scope of lending and non-lending operations to reap scale economies in its transaction costs, facilitates more

Table 1

Major Features of PACS and FSS

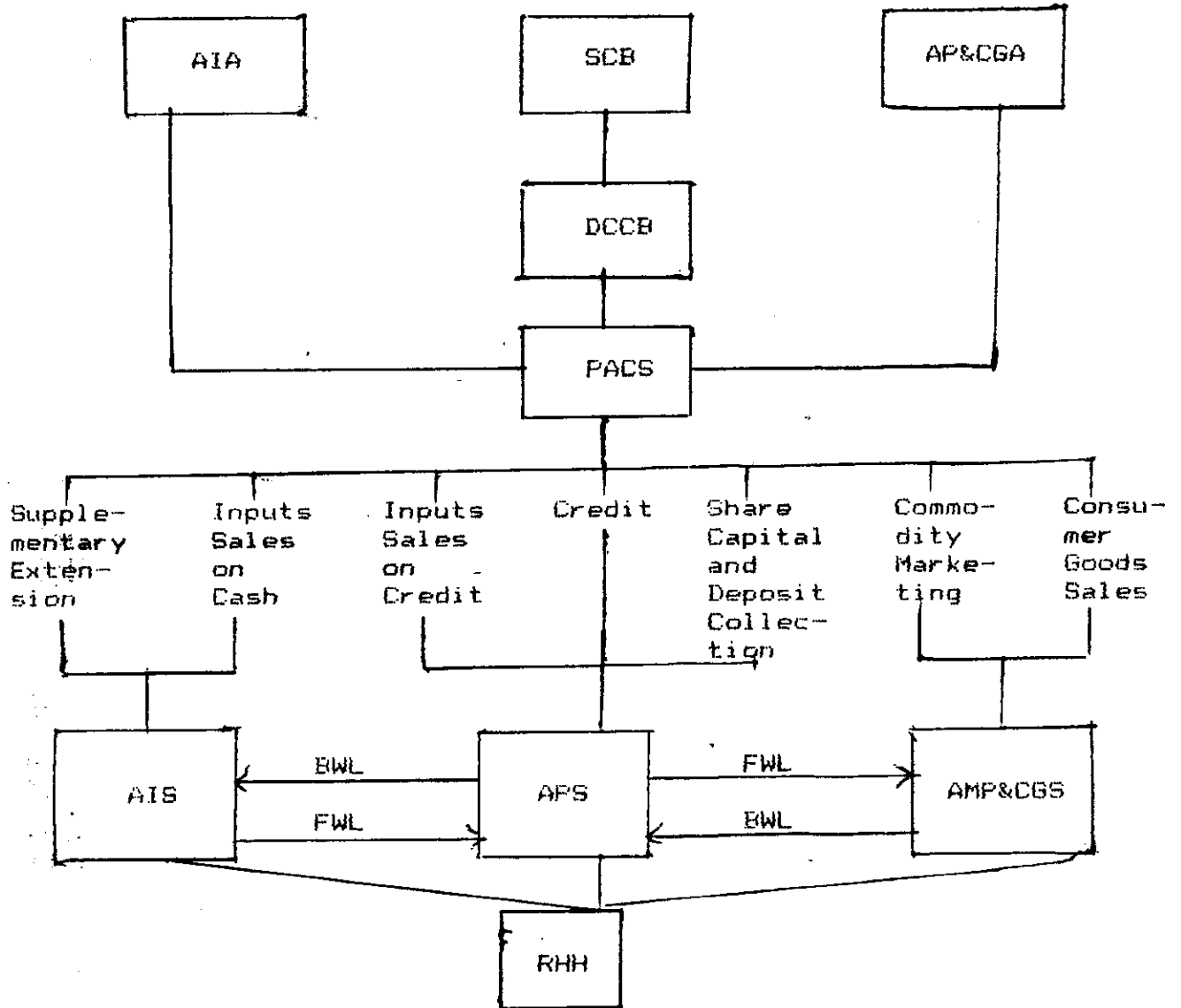
Features	PACS	FSS
1. Area coverage	Generally, a small area of not less than 2000 hectares of cropped area	A large area of operation extending upto a block or population of 10,000
2. Type of beneficiaries	All types of farmers	All farmers and other households including rural artisans, agricultural labourers etc.
3. Nature of credit business	Short-term crop loans and medium term loans for agricultural and allied activities	Multi-term and multi-purpose credit
4. Nature of non-credit business	Supply of farm inputs, marketing and processing, and distribution of essential commodities, etc.	Package of services
5. Management	<p>a) Full-time paid secretary</p> <p>b) Board of directors consisting 11 members of whom not less than 50 percent shall represent weaker sections</p>	<p>a) Whole-time managing director and functional specialists</p> <p>b) Board of directors consisting of 11 members of whom 5 shall be representatives of weaker sections and 2 shall be elected among other members besides 2 nominees of the Registrar of Cooperative Societies, 1 nominee of the financing bank and the managing director, ex-officio</p>

Diagram 1: Vertically and Horizontally Integrated FSS



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- AIA = Agricultural Inputs Distribution Agencies
 - SCB/CB = State Cooperative Bank/Commercial Bank
 - DCCB/RO = District Central Cooperative Bank/Regional Office
 - AIS = Agricultural Inputs Distribution Sub-system
 - APS = Agricultural Production Sub-system
 - AP&CGA = Agricultural Produce and Consumer Goods Distribution Agencies
 - AMP&CGS = Agro-Marketing and Processing, and Consumer Goods Sub-system
 - BWL = Backward Linkage
 - FWL = Forward Linkage
 - RHH = Rural Households

Diagram 2: Vertical and Horizontal Integration of PACS



For legends see Diagram 1

effective competition with the informal lenders, and reduces rural borrowers' and depositors' transaction costs. Horizontally integrated multi-functional structure of operations of a RFI is advantageous in six different ways. It enables achieving (a) agriculture's much required complementarity between working and fixed capital, (b) diversified and robust agricultural and other farm-level economic activities which are often complementary and/or supplementary, (c) larger non-inflationary production and saving linkages of technological change in agriculture, (d) larger consumption linkages of this change, (e) more effective alternative to informal lenders who operate simultaneously in credit, traditional inputs, and commodity markets, and hence (f) large scale and scope economies and thereby increase viability of a RFI in the sense of higher loan collection, recycling of funds, as well as profitability.

Both quantitative and qualitative criteria need to be conceptualized to test these propositions. For example, beneficial impact of vertical organizational structure of a RFI may be tested by finding out extent of finance and managerial guidance that come from the upper level and how has it changed the time-efficiency and quality of decisions and related services. Similarly, beneficial impact of higher density of field branches of RFI may be tested by analyzing extent of reduction in transaction costs of clients and their organization, extent of increase in size and scope of its operations, and extent of decline in dependence of clients on informal lenders. Beneficial impact of multi-functional operations can be tested by

studying extent of improvement in clients' income and its stability, efficiency and size of increase in their production, savings and consumption, and that in RFI's loan recoveries, deposit mobilization, equity, average transaction costs and scale economies in them, and profitability.

Analysis for application of these criteria requires data from the organisation as well as its clients. Since this paper is based exclusively on available secondary data some of these propositions related to beneficial impacts are tested by applying the following criteria:

- 1) Coverage of clients with special reference to weaker sections in (a) membership, and (b) borrowing membership;
- 2) Size of operations per society to quantify scale of operations;
- 3) Composition of credit and non-credit operations to draw implications to the extent of diversification and scope of operations and their benefits to the members;
- 4) Average transaction costs;
- 5) Scale and scope economies in these costs;
- 6) Loan delinquency rate;
- 7) Proportion of cooperatives earning profits.

Past studies have mainly concentrated on criteria nos.1, 2, and 6. Moreover, these studies have not analysed these criteria comparatively for FSS and PACS. Wherever they are so studied the comparison is made between FSS and PACS which have different

years of functioning. Comparing a FSS with first five years of working with PACS with longer period of working implies comparison of a pigmy with a giant. Analysis in this paper is devoid of these limitations to a great extent. Thus, all the seven criteria are comparatively studied by considering first eight years of working of both PACS and FSS. For PACS the years chosen are from 1957-58 to 1964-65 which is soon after implementation of major restructuring and revitalization policies. For FSS the corresponding years are 1976-77 to 1983-84. Even the comparison between a pigmy and a giant is attempted in order to develop a perspective on comparative performance of the extent of improvement achieved over a short-period vis-a-vis long-run. Since time series data are utilized the monetary values of variables are deflated by agricultural NDP deflator.

IV. Results and their Analysis

Tables 2 and 3 provide the results. Comparison of columns 2 and 4 in Tables 2 and 3 reveals that the FSS has performed better than PACS in respect of four out of seven criteria discussed earlier. These are coverage, scale of operation, composition of credit and non-credit operations, and scale economies in transaction costs. However, considering loan delinquency rate, average transaction costs, and proportion of societies in profit the performance of PACS is better than that of FSS. Since FSS's performance on last two of these three criteria is fairly comparable to PACS performance, it is only in respect of loan delinquency the FSS has inferior achievement compared to PACS.

Table 2 : COMPARATIVE PERFORMANCE OF PACS AND FSS

Item	PACS		FSS
	Average of 1957-58 to 1964-65	Average of 1976-77 to 1983-84	Average of 1976-77 to 1983-84
Number of Societies	200204	100455	2143
1 COVERAGE:			
a) Membership per Society	98	574	2151
b) Distribution of Membership:(%)			
i) Farmers above 2 Ha		33.50	20.92
ii) Farmers upto 2 Ha		46.30	57.97
iii) Agri. Labourers		9.55	11.69
iv) Rural Artisans		2.27	2.41
v) Others		8.38	7.01
c) Borrowing Members(%)	49.05	33.37	23.63
d) Weaker Sections:(Percentage Share)*			
i) Borrowing Membership		19.36	19.35
ii) Short-Term Loan Advanced		9.44	11.27
iii) Medium/Long Term Loan Advanced		10.25	17.17
2 SCALE OF OPERATIONS:(Rs.Lakhs)			
a) Nominal Terms:			
i) Assets and Liabilities	0.33	7.66	20.83
ii) Credit and Non-Credit Operations	0.15	3.18	9.09
b) Real Terms:(1970-71 = 100)			
i) Assets and Liabilities	0.60	3.91	9.77
ii) Credit and Non-Credit Operations	0.26	1.56	4.81
3 LOAN TERM STRUCTURE:			
a) Advance:(%)			
i) Share of Short-Term Loan		85.64	80.80
ii) Share of Medium/Long Term Loan		14.36	19.20
b) Outstanding:(%)			
i) Share of Short-Term Loan		72.37	69.58
ii) Share of Medium/Long Term Loan		27.63	30.42
4 COMPOSITION OF CREDIT AND NON-CREDIT OPERATIONS:(%)			
i) Credit Operations	72.81	59.88	48.12
ii) Produce Marketed	2.65	1.43	1.92
iii) Goods Processed	1.95	0.22	0.29
iv) Farm Requisites Supplied	12.28	23.26	27.09
v) Consumer Goods Sold	9.24	14.71	20.91
vi) Deposits Collected	1.00	1.30	1.67
5 LOAN DELINQUENCY RATE	17.34	53.97	41.16
6 AVERAGE TRANSACTION COST:			
a) To Assets and Liabilities	0.012	0.017	0.017
b) To Total Size of Operation	0.022	0.039	0.037
7 SOCIETIES IN PROFIT(%)	68.07	52.83	59.32

* Relates to Scheduled Castes and Scheduled Tribes only

SOURCE: Reserve Bank of India, Statistical Statement relating to Cooperative Movement in India (Various Issues)

TABLE 3 : ESTIMATED DOUBLE-LOG TRANSACTION COST FUNCTION OF PACS AND FSS

Item	PACS		FSS
	1957-58 to 1964-65	1976-77 to 1983-84	1976-77 to 1983-84
1. Scale Parameter	1.424 (0.849)	1.774 (0.188)	0.818 (0.113)
2. Constant	-8.658 (0.462)	-12.358 (1.988)	-2.682 (0.854)
3. R-Bar Square	0.992	0.926	0.881
4. F - Value	833.69	88.487	52.468
5. D.W Statistics	2.138	2.447	1.968

* Statistically significantly greater than One suggesting Scale Diseconomies

** Statistically not significantly different from One suggesting Constant Returns to Scale

Figures in parantheses are Standard Errors

This may be because by mid-1970s loan recovery climate had deteriorated on account of political factors. In this context if loan delinquency rate of FSS is compared with that of PACS during 1976-77 to 1983-84, then the former has done better than the latter. Further, if these two cooperatives are compared for these years, then FSS has performed better than PACS on all the seven criteria (see columns 3 and 4 in Tables 2 and 3). The major failure of FSS is in respect of lower share of borrowing membership, and meagre share of produce marketed and processed. The former may be because of higher loan delinquency rate. And the latter is because of (a) competition from private sector and marketing and processing cooperatives, and (b) processing entails highly specialized technical personnel and large capital both of which have not been incorporated in the design of FSS. It is in this restrictive sense FSS is just like PACS which has also not fared well in achieving agro-marketing and processing. Even the failure of PACS in this regard is due to the same reasons that are applicable to FSS. Neither PACS nor FSS possesses any comparative advantage in this operation. Hence, there is no rationale for encouraging these cooperatives to undertake this operation. Considering this as a context, it is fairly clear that FSS has succeeded as a field-level RFI compared to PACS. This is further borne out from the annual compound growth rate in (a) loans outstanding and advanced in real terms, (b) deposits in real terms, (c) farm requirements/inputs supplied in constant prices, and (d) consumer goods sales in such prices (see Table 4).

Table 4

Annual Compound Growth Rate in Credit and
Non-Credit Operations

	Deposits	Loan out- stand- ing	Loan advan- ced	Inputs sales	Produce market- ed	Produce proce- ssed	Consumer goods sales
(Percent per annum)							
1. PACS							
- 1957-58 to 1964-65	14.28	9.91	11.66	8.05	-5.97	-3.97	-
- 1976-77 to 1983-84	8.52	2.51	4.41	6.48	-5.57	8.13	11.78
2. ESS							
- 1976-77 to 1983-84	28.86	21.98	18.82	22.34	-19.65	-20.76	3.51

V. Conclusions and Implications

Main conclusion of this paper is that FSS has performed better than PACS. Both FSS and PACS have not succeeded in undertaking agro-marketing and processing function. The former suggests that FSS type of cooperative financial institution may be preferred to PACS. Since PACS still dominate question arises as to whether they may be converted into FSS or not. Our answer is affirmative. This may particularly be done for those PACS which have performed well to enable them to enlarge their scale of operation through both intensive and extensive expansion of their operations. But those PACS, which are weak, may be first converted into small sized. This would enable them to improve quality of the operations. It would also enable them to intensify their operations in villages covered by them. We hope that implementation of these suggestions would not conflict with the aspirations of rural populace about having its own institution.

As regards undertaking agro-marketing and processing by FSS as well as PACS our suggestion is that they may provide market information services instead of direct procurement and processing. This will be consistent with their capital including human capital base of these institutions. It will thereby relieve them of tasks in which they do not have advantage in comparison to commodity based agro-marketing and processing in both cooperative and private sectors.

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