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THE CO-OPERATIVE INPUT IN THE DEVELOPMENT OF THE PILOT HILLSIDE AGRICULTURAL PROJECT (PHILAGRIP) SOUTH TRELAWNY JAMAICA

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THE CO-OPERATIVE INPUT IN THE DEVELOPMENT OF THE PILOT HILLSIDE AGRICULTURAL PROJECT ("PHILAGRIP")

by:

Milton R. Wedderburn

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No. IV - 8 Milton R. Wedderburn, "The Co-operative Input in the Development of the Pilot Hillside Agricultural Project (PHILAGRIP)", April 1980

F O R E W O R D

On January 7, 1980 an Agreement was signed between the Government of Jamaica and the Inter-American Institute of Agricultural Sciences (IICA) for the preparation of a project document to be called "Pilot Hillside Agricultural Project" (PHILAGRIP).

The "PHILAGRIP" Project, to be financed by the Inter-American Development Bank (IDB) will be located in an area adjoining on the north and east sides of the Allsides Project which is financed jointly by the Simon Bolivar Fund and the Government of Jamaica.

One of the objectives of the Project is the promotion of food production. The Co-operative approach for agricultural production is one which has been given some consideration in the historic development of agriculture in the Caribbean.

Studies have been made of various forms of association which may be pursued for agricultural production. In the last few years there has been great emphasis on the associative forms of agricultural production in all of Latin America. These associative forms, if successful, are based on an entrepreneurial organisation with the objective of achieving economies of scale for optimising revenues while managing expenditures carefully. In Jamaica, due to the particular characteristics of some rural areas, we find that there are some resources which are plentiful such as the human resource and some resources which represent the constraints such as the capital resource. This situation creates an imbalance for the efficient use of the available resources causing undue unemployment and under-employment.

One solution for this type of problem which is generally present in the "Minifundia" system of land tenure is the associative form of production which relies on collective effort designed to solve some of these problems for the benefit of all. The associative form of production is not only economically positive but it is also socially integrative.

Hillside agriculture in Jamaica is practiced by approximately 150,000 farmers (nearly 80% of the total number of farmers according to the census of 1969). These farmers have an average farm size of 1.5 acres per farm and all of them are under five acres.

During the last two years a Farmers' Pre-Co-operative was initiated at the Allsides Project. The experience of the Allsides Co-operative has allowed Mr. Milton R. Wedderburn to write the present paper on "The Co-operative Input in the Development of the Pilot Hillside Agricultural Project" (PHILAGRIP).

We welcome Mr. Wedderburn's paper not only as a new addition to our collection of papers but also as a positive input in the effort for future implementation of the "PHILAGRIP" Project.

Percy Aitken-Soux
Director
IICA Jamaica Office

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GOVERNMENT OF JAMAICA/IDB/IICA PILOT HILLSIDE AGRICULTURAL PROJECT

(Based on the Allsides Model)

CO-OPERATIVE INFORMATION AND INPUT

1. THE CO-OPERATIVE DEPARTMENT

1.1 The Co-operative Department came into legal existence with the enactment of the Co-operative Societies Law, Chapter 75 of the Statute Laws of Jamaica on the 1st October, 1950. By a number of amendments over the years, the most substantial taking place between 1973 and 1976, the Law has been adjusted and is now cited as the Co-operative Societies Act and Regulations.

1.2 The Act stipulates the manner of the appointment of the Registrar of Co-operative Societies, and his Assistants, groups which may be registered under the Act and the conditions of registration.

1.3 Apart from the legal conditions for registration, each grouping must satisfy the Registrar that its operation is economically viable, and that economic and social benefits will accrue to its members specifically and to its area of operations in general.

2. OBJECTIVES

2.1 The objectives of the Department are:

(a) Promotion of Co-operatives.

(b) Co-operative education in Pre-Co-operatives and Registered Societies.

(c) Regulation of Co-operatives through inspections, following visits, inquiries, arbitrations and dissolutions.

(d) Conducting Annual Audits of each Registered Society.

3. *INTERNAL STRUCTURE*

3.1 The Registrar of Co-operative Societies reports to the Permanent Secretary, Ministry of Local Government and Community Development, Until very recently this organisation was responsible to the Ministry of Agriculture but later came under the jurisdiction of the Ministry of Parliamentary and Rural Affairs, and presently falls under the Ministry of Local Government and Community Development.

3.2 The Registrar has three (3) Assistants, namely:

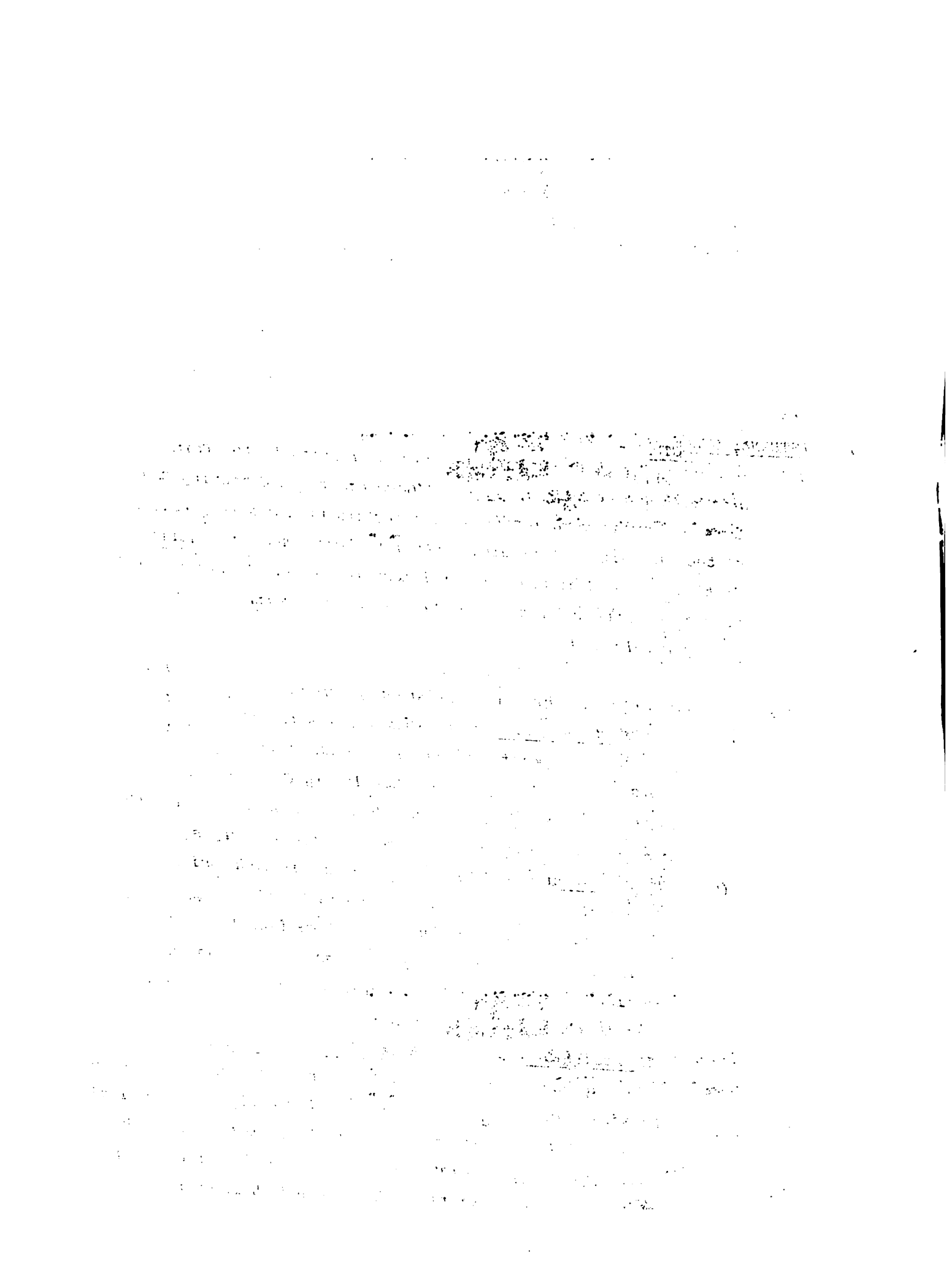
(a) The Deputy Registrar - to whom reports the three (3) Regional Co-operative Officers. Each of these Officers has a team of Education and Regulatory Co-operative Officers to man each of the three regions into which the country is geographically divided for this purpose.

(b) The Assistant Registrar (Audit) - who is responsible for audit islandwide. His audit team is based at Head Office (Kingston) and travels out to the Societies to conduct their audits. Additionally, Professional Accountants are appointed as Auditors for special societies, and they report to this Assistant Registrar.

(c) The Assistant Registrar (Education and Research) - is also based at Head Office but is more a resource section for the provision of a source of educational material, statistical data, and general information for the promotion and education of Pre-Co-operatives and registered societies by the Regional Co-operative Officers and their staff.

4. *REGIONAL STAFFING*

4.1 The Western Region comprising the parishes of Westmoreland, Hanover, St. James, Trelawny and St. Ann, is grossly understaffed at present.



The ideal staff situation should be:

1 Regional Officer
6 Regulatory Officers
7 Education Officers

which would provide a Regulatory and an Education Officer for each parish. Four (4) Officers who were abroad on study leave returned home and resumed duties in January 1980. One of these Officers is now stationed in the parish of Trelawny.

5. Recruits to the Department should possess minimum qualifications of four (4) subjects at Ordinary Level Passes of the General Certificate of Examination (Cambridge - external). Two such subjects should be English and Mathematics. In addition, the recruit should have some accounting knowledge. However, recruits are given intensive in-service training in Law, Management, Accounts and Group Dynamics along with exposure to the practical aspects of the job. Frequently, Officers attend various overseas courses sponsored by foreign Governments and/or the Government of Jamaica, as well as locally sponsored "Refresher Courses".

6. Officers of the Co-operative Department form a part of the country's Civil Servants, and as such all finance, equipment and other needed resources are derived from the budgetary allocations from the relevant Ministry. As is customary, there is always a shortage of not only staff, but of equipment and finance for specific and effective performances. (See Appendix I - Structure of the Co-operative Department.)

7. <u>THE ALLSIDES PROJECT</u>

7.1 <u>Background</u>

The project is the result of the efforts of the Government of Jamaica and IICA to assist the island's farming community in preventing soil erosion, as a means of adopting intensive practices and sound land use measures in producing agricultural crops on hilly slopes of the country. This is imperative since about 80% of the farmers with acreages of less than five acres pursue agriculture on such types of land.

7.2 *Objectives*

The Allsides Project seeks to assist the farmers in improving their social and economic development and to help in the general upliftment of their overall standards of living, through:

(a) Production

To initiate, develop, encourage and undertake better and more economical methods of production through:

(i) the introduction of modern hillside farming techniques and improved farm practices, the production of the current crops will be increased;

(ii) the introduction of new cropping systems, thereby enabling him to diversify his operations and so create other avenues of earning and income; and

(iii) improvement in the small livestock population of the area, thus generating more income and providing a good source of relatively cheap protein for the farm family, while supplying organic manure for soil improvement.

(b) Marketing

To initiate, develop, encourage and undertake better and more economical methods of marketing through co-operative marketing.

(c) Watershed Conservation

To encourage and develop more efficient and economical methods of soil conservation and land utilization by:

(i) adopting new and effective techniques of farming in hillside agriculture;

(ii) establishing orchards and/or forests for the creation and maintenance of watershed areas.

(d) Farmer Representation

(i) As an organisation, the farmer is represented administratively and/or otherwise at the local level;

(ii) to enter into arrangements with any authority, governmental, private, local or otherwise on behalf of the farmers and to obtain from any such authority any rights, privileges or concessions that may accrue to such farmers.

(e) General

To do all other acts as are incidental or conducive to, or consequential upon the attainment of the foresaid objectives.

8. THE ALLSIDES PRE-CO-OPERATIVE 1/

8.1 Arising from a number of training days and demonstrations arranged for farmers, the Project Managers requested farmers to express their views concerning their most urgent needs. This was felt to be a basic requirement since farmers from time to time had indicated to the Project Managers that there were certain factors which made it difficult for them to practice agriculture as successfully as they wished. Farmers had indicated that they wished assistance from IICA and from other organisations.

8.2 The Co-operative Department was requested by IICA to participate in deliberations with farmers at a meeting called specifically to hear farmers' views with respect to critical issues affecting their progress. Farmers expressed the view that they were unable to procure critical tools (forks, cutlasses and files), fertilizers, pesticides, seeds and other planting materials. They further indicated that even when these could be found, the prices were so high as to make it impossible for them to purchase these goods and supplies. They therefore felt that they could have the costs reduced if they could join in a co-operative unity.

1/ Wedderburn, R. Milton, "Allsides Farmers' Pre-Co-operative: A Socio-Economic Assessment", IICA/Jamaica No. IV - 6 March 1980.

8.3 For this reason, the assistance of the Co-operative Department was sought. This assistance was provided firstly through the late Mr. Vivian Smart, former Registrar of Co-operatives, and then through Mr. Milton Wedderburn, the Regional Co-operative Officer for the Western Region. The request made by farmers led to more detailed discussions in scheduled meetings between Mr. Wedderburn and the farmers engaged in the Allsides Project.

8.4 Arising from the various meetings between Mr. Wedderburn and the farmers the main considerations for co-operative involvement appeared to be:

(a) Co-operative Purchasing

The establishment of a Co-operative Agricultural Store for the provision of all agricultural inputs and services for the benefit of the farmers.

(b) Education

To encourage and develop areas of complementary education at the various levels of the farm family - areas of education to include agricultural, co-operative and social integration.

(c) Social Activities

To create an awareness of, and develop participation in the areas of sports, celebrations, debates and cultural activities.

9. PROPOSED FUNCTIONS OF THE CO-OPERATIVE UNIT IN RELATION TO THE "PHILAGRIP" PROJECT

9.1 The Western Regional Unit of the Co-operative Department has been requested by IICA to assist in the initiation and implementation of an appropriate type of formal farm organisation. This resulted in the creation of the Allsides Pre-Co-operative which is designed to provide assistance to the farmers in the following areas:

(a) general organisation of the farmers into a functional unit;

(b) formal and informal training of the staff in basic management techniques, book-keeping, shop management;

(c) *informal training of the Steering Committee in co-operative practices and principles, rules, law and regulations;*

(d) *training of membership in co-operative and business fields;*

(e) *representation of farmers' interests at local and national levels;*

(f) *provision of agricultural inputs easily and at competitive prices;*

(g) *providing alternative marketing channels in the best interests of the farmers;*

(h) *direct supervision of credit, and the provision of loans for specific activities as required; and*

(i) *weekly collections of the repayment of farmers' loans.*

9.2 *Mechanics of Organisation*

Work in the area for the new project - "PHILAGRIP" is being pursued within the ambit of the national strategy for the development of agricultural co-operation. The project area embraces one larger than the Allsides Project; but still large enough to provide a project of manageable dimensions. A major and important link between the Allsides Project and "PHILAGRIP" is the formally structured Allsides Pre-Co-operative.

9.3 *The foundation members of the Allsides Pre-Co-operative came from the project area. Several preliminary meetings with farmers helped to determine the type of formal organisation which farmers decided they needed, and resulting from this a group of farmers met and selected a Steering Committee for the initiation and conduct of the Pre-Co-operative.*

9.4 *Strategies for saving and keeping the group together were:*

(a) *A savings plan was initiated whereby at least $2.00 would be saved by each person on his first attendance at a meeting of the Co-operative. This activity netted about $65.00 in about ten weeks.*

(b) Individual farmers attending the meetings were encouraged to offer loans to the Pre-Co-operative. These loans would be guaranteed by the organisation through its Steering Committee, and repayment would commence about six months later with accrued interest at 6%. Only about $20.00 was loaned. It is believed that as confidence in and understanding of the Pre-Co-operative become more widespread, the volume of loans from farmers will increase. It will be necessary to take appropriate and precise measures to develop this loan activity.

(c) The Ministry of Agriculture loaned to the group ten tons of fertilizer valued at $3,105.00 to begin its trading operations. This money is repayable at 6% per annum as from March 1980.

(d) Through one of its activities IICA provided inputs in kind to assist twenty selected farmers to pursue improved cropping systems on their farms. The value contribution for these twenty farmers has been made available to the Co-operative Store to assist in its financing and creating economies of scale. The twenty farmers selected are allowed to obtain their inputs in kind (free up to the limit guaranteed by IICA). Labour is excluded from this kind of assistance.

9.5 A pricing policy for goods sold in the store has been worked out with the Steering Committee and implemented by the Store's Manager. Included in the price paid for supplies by the farmer, e.g. fertilizer, is a share cess. In this way Share Capital is being built up without being burdensome to the individual.

9.6 All farmers operating lands immediately surrounding the project area and indeed in other parts of the parich of Trelawny, are eligible to become members.

The conditions for membership therefore are that the applicant must be:

(a) a farmer;

(b) over sixteen years old and a resident of the parish of Trelawny;

(c) of good character, and should not be known to be dishonest and a trouble-maker; and should

(d) have aims and objectives which are not in conflict with those of the Pre-Co-operative;

(e) pay an Entrance Fee of $1.00; and

(f) have at least two (2) shares of a value of $1.00 each.

9.6 The Western Regional Co-operative Unit became involved in discussions with the Allsides Development Project in the latter part of June 1979. At its first meeting held on 5th July 1979, over fifty farmers were present of which twenty-six pledged to become members.

To date the following have been achieved:

(a) The group has expanded from its original twenty-six (26) members to one hundred and fourteen (114) members within three months.

(b) A Steering Committee of five persons was elected to manage the operations of the Pre-Co-operative until it becomes formally registered.

(c) Formal training in book-keeping, basic management and shop management has been given to two prospective employees (only one was eventually employed, mainly due to the small volume of business at this time).

(d) Share Capital now stands at $143.00.

(e) A co-operative supply store is being operated (from October 1979) using premises rented from a farmer at a strategically located site. It is hoped that this arrangement will be temporary and that in time more permanent arrangements can be made.

(f) The relevant accounting records and bank accounts have been put into operation.

(g) Informal training in business management and shop menagement is being given to the Shop Manager.

9.7 Nearly all that has been accomplished covers the mechanics of organising and getting the Co-operative Store operative. It is felt that once the needs are identified positive solutions should follow.

9.8 The area of promotion has been tackled through the operation of the store. Membership has risen through the method used to attract members, but there is the pressing need for co-operative education among the farmers.

10. PROJECTIONS FOR THE FUTURE

Projections have been made for a five-year period, and cover the operations of the Co-operative Store and its subsequent expenditure and income to the farmers. They also cover crop production and the possible provision of financial assistance to farmers to help them to achieve their objectives.

10.1 Crop Production

The rate of increase in production is directly linked to the rate of transfer of the new technology introduced to the farmers. As the Co-operative provides a formal structure of the organisation, it is imperative that appropriate aspects of training be channelled through it. As such, it is envisaged that the loans made to the farmers for development will be channelled through and monitored by the Co-operative.

10.2 (a) Copies of all development programmes will be kept by the Society and all loans will be pooled and lodged in the Society's bank account. All disbursements will be made by the Manager on the advice of the Agricultural Extension Officer. Records of disbursement will be made on the appropriate cards. (See Appendix II)

(b) Total loan is projected to be of the order of $608,000.00 and averages approximately $2,630.00 per farmer. There is a range of between $1,500.00 and $3,500.00. The loan is for a maximum of five (5) years, at an interest rate of 6% per annum.

(c) It is suggested that repayments should be made on a weekly basis. The average weekly repayment over a forty-eight week year is about $17.67 with a range of between $10.06 and $23.50. A further suggestion is that one of the store's personnel (Assistant Manager) should be solely responsible for the weekly collections. As the farmers are selling produce every week, it would appear that the constraints of collection would be minimal.

10.3 Operation of the Co-operative Store

This covers a five-year period. The gross shop sales are arrived at by assuming that expenditure will be:

(a)	Operational Expenses	(yr 1) 1/ $687,054 x 2/3	=	$458,036
(b)	Capital Expenses	(yr 1) 2/ $ 70,360 x 1/3	=	23,453
				$481,489
(c)	Farmers outside of the project area - approx. 400 farmers spending $500 annually		=	$200,000
				$681,489

1/ See Appendix IV

2/ See Appendix V

The succeeding years' sales have been calculated by allowing for a 20% increase each for the second and third years, and a 10% increase for each of the fourth and fifth years.

10.4 (a) Gross profit margin averages 20% and from this allowances are made for paying interest of 5% on share capital. A bonus of 5 cents in the dollar will be paid during the first full year of operation based on the gross turn-over and is projected to increase to 9 cents in the fifth year.

(b) To achieve this volume of sales, the Society will require a loan of about $130,000.00 to purchase stock. 1/ It is hoped that such a loan can be obtained at an interest rate not exceeding 10% for a period of ten years. However, should the Society receive a fee for the disbursement and collection of members' loans, this fee could be used to reduce substantially the dependence on a loan for the operations of the store, or it could be used to help provide other services for the farmers. Such a management fee should not be less than 2% of the total members' loans or $12,165.00 (2% x $608,255.00).

10.5 Education and Training

Within five years, the technology transfer should be about 80%. This can only be achieved through education and training. It is hoped that achievement will come through:

(a) formal and informal training courses;

(b) farm visits;

(c) demonstrations and experiments; and

(d) meetings and seminars.

1/ See Appendix VI

Additionally, direct co-operative education will be given with special emphasis on member education, while the preservation of a business atmosphere will be done through the training of the Society's employees and its Management Committee.

The strategy employed will be such as to create in the first instance, a functional appreciation of the areas of education and management that have been tackled. A pre-requisite for achieving success is that adequate staff - numerically and qualitatively will be provided at all times. This should be so provided, however, in a manner which will ensure that in time the co-operative will develop those services which a Society is normally expected to provide, thereby reducing reliance on Government.

11. *PROJECTED COSTS* - are divided into:

(a) *Manpower - Co-operative Unit*

PARTICULARS	Y	E	A	R	S
	1	2	3	4	5
CO-OP. OFFICER					
Salary (PMA I)	5,392	5,692	5,992	6,292	6,592
Car Upkeep	1,800	1,800	1,800	1,800	1,800
Travelling, etc.	2,400	2,400	2,400	2,400	2,400
	9,592	9,892	10,192	10,492	10,792
SUPERVISOR					
Travelling, etc.	1,200	1,300	1,400	1,500	1,500
Miscellaneous	1,210	1,340	1,470	1,580	1,720
TOTAL	12,002	12,532	13,062	13,572	14,112

There is the possibility of a thirty percent (30%) Salary increase.

(b) *Education and Training*

PARTICULARS	Y	E	A	R	S
	1	2	3	4	5
FORMAL COURSES					
Transportation	450	540	630	720	810
Living & Catering	3,000	3,200	3,500	3,750	4,000
	3,450	3,740	4,130	4,470	4,810
INFORMAL TRAINING					
Catering	600	650	700	750	800
Training Material	300	350	400	450	500
Easel & Board	150	-	-	-	-
Miscellaneous	450	480	520	570	620
TOTAL	4,950	5,220	5,750	6,240	6,730
CO-OPERATIVE INPUT (33-1/3%)	1,650	1,740	1,917	2,080	2,244

(i) Three courses annually of three days each for formal training.

(ii) Number of participants for each formal course not to exceed thirty.

(iii) Six informal training sessions to be held annually.

(iv) Co-ordinated training - co-operative input to be approximately 33-1/3%.

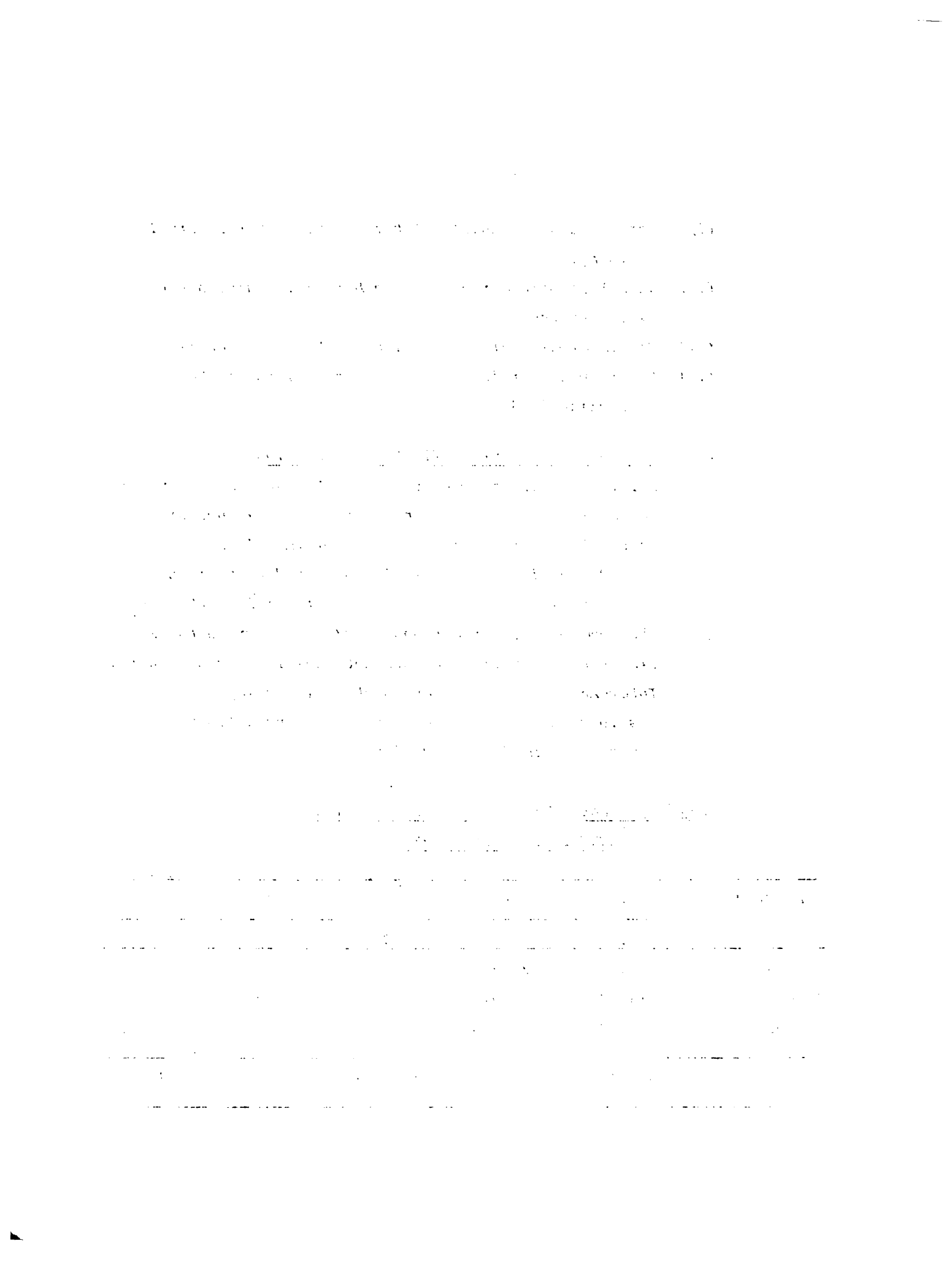
(c) Capital Expenditure - (1) Farmers Funding

For the farmers to make the project a success, loans are needed for both capital and operational expenditures. Based on the projections made, a minimum loan of $608,255.00 is needed. It is suggested that financing be underwritten by the Government of Jamaica, through the Jamaica Development Bank and/or the Agricultural Credit Board or from an international lending agency (e.g. Inter-American Development Bank). It is important that a distinction be made between underwriting a financial activity and making an outright grant.

CAPITAL EXPENDITURE - (II) SHOP OPERATIONS

ANNUAL GROSS TURN OVER

PARTICULARS	Y	E	A	R	S
	1	2	3	4	5
Shop Sales	478,500	574,200	688,600	757,500	833,200
Irish Potato	13,500	17,010	23,760	35,280	42,525
Peanuts	7,425	12,484	19,602	20,907	26,185
TOTAL	499,425	603,694	731,962	813,687	901,910



12. The gross turn over is directly linked to the capital and operational expenses of the farmers. Approximately 60% of the turn over is made possible through the development programmes. The loan that will be needed to make this turn over possible is about $130,000.00. Again funding will have to be from a Governmental guaranteed source.

13. **BENEFITS**

13.1 Benefits of the Project are many and are both economic and social. Some economic benefits to be derived are:

(a) Over the five years the average net income per farmer rises from $2,765.00 to $18,742.00. A forty percent (40%) inflation allowance in the fifth year gives an average net income of $11,245.00 (uninflated income).

(See Appendix X)

(b) The average projected net return per farmer is more than adequate to meet the repayment of loan and interest of $848,40 annually.

(c) Closer loan supervision will help the farmer to spend wisely and so get more out of his dollar.

(d) With the farm store suitably placed in the area, the farmer should generate significant savings in transportation costs, time wasted in unnecessary absences from the farm and other incidentals that are the main causes of unproductivity. (The Co-operative will need assistance in securing capital needed to provide appropriate and lasting store facilities.)

(e) The increase in livestock rearing should provide an adequate source of protein for the farmer and his family.

(f) Increasing dependence on farmers' own production thereby enabling them to channel more of their earnings into areas of economic activity. This eventually should make farmers more financially independent.

(g) The Co-operative by showing its capacity to provide agricultural input, promote improvement in the agricultural sector, foster the central aim of government policy and assist in the promotion of agricultural food production, will have served its basic purpose in helping to revive

13.2 Social benefits that may come to the farmer are:

(a) By his participation in the formal organisation he should become a better and keener observer of the world around him. There should be increased participation in community activities which can expose any latent leadership qualities possessed by farmers.

(b) Leaders within the community become more effective and so assist in the provision of vital and much needed amenities.

(c) Generally, the Project will further assist the Co-operative process as it expands within the parish, fulfilling the needs of the farmers, and leading to their greater participation in the affairs of the community and enhancing farmers' ability to help themselves.

14. <u>SUMMARY</u>

14.1 The presentation has indicated the present structure of the Co-operative Department of the Ministry of Local Government in general terms. It also sets out the roles played by the Department and possible adjustments in the structure to enable it to achieve its roles.

14.2 In relation to the "PHILAGRIP" Project, the presentation sets out in precise terms the detailed logistics, together with costs and various inputs - capital, recurrent, human resources - needed for the development of the Allsides Pre-Co-operative Society which is being used as the model and indeed the extension for the Co-operative movement in Southern Trelawny. It further points out the supportive effects which could be achieved through economies of scale working in a larger area than that which encompasses merely the Allsides Project area.

14.3 *There has also been presented the foundations for institution building and ultimately the institutionalization of co-operatives as a viable vehicle for rural development. In this context, the benefits which are likely to accrue to the community in which the two projects are located have been stressed. The benefits do not relate only to economic ones but also to the dependent social ones.*

The costings as used are based on possible results and the benefits will depend to a great extent on the provision of inputs, the attitudes of all concerned i.e. Co-operatives and staff at all levels. It will further depend on the willingness of these people to become seriously involved and to perform the roles assigned to each group. The cost estimates must be regarded as variable in terms of changing situations.

14.4 *A listing of the benefits of this exercise indicates the following:*

(i) <u>Agricultural Development</u> - as derived from:

- *increased net income to farmers, which will meet their loan requirements and provide for savings and re-investment;*
- *adoption of improved farming techniques consistent with sound land usage and more intense use of this scarce resource;*
- *increased food production and thereby a potential for reducing reliance on imported foods, and assisting in reviving the country's economy; and*
- *providing a basis for increased rural employment and agro-industrial development.*

(ii) <u>Improved Living Standards</u> - should follow from:

- *increased incomes;*
- *improved training facilities associated with the communication and application of improved techniques.*

(iii) The Role of the Co-operative itself

- by promoting institutional linkages and fostering agricultural development;
- by bridging gaps between credit, marketing and extension services in particular.

14.6 The Co-operative Farm Store

This capital resource if properly developed and managed should help farmers to reduce the costs of material inputs, provide a means for saving, marketing and investment. It will also help farmers to obtain their farm inputs on a more timely and structured basis.

14.7 Other Benefits

These relate largely to the development of the Co-operative attitudes in relation to:

- decision making processes;
- development and exposure of latent leadership qualities;
- developing and maintaining good human relationships;
- lessening the incidence of malnutrition and enhancing the general improvement in health conditions of the farm family.

15. CONCLUSION

A list of the facts as presented is already in existence in the Allsides area. Financing also has been a problem and will continue to be so. The Co-operative is expected to provide a medium to attract financing through its structured organisation, and through the strict management practices which it should project.

The outlines of the Allsides model can be adapted to similar areas. Necessary pre-conditions for success are a careful analysis of the position at the very outset, clear evaluation and statement of problems and needs, an assessment of the attitudes of rural people setting out their own goals, inspirations and limitations. Most importantly their needs as expressed by themselves should be determined. These can be achieved through surveys such as have been carried out in the Allsides area.

(111) [illegible]

[illegible]

[illegible]

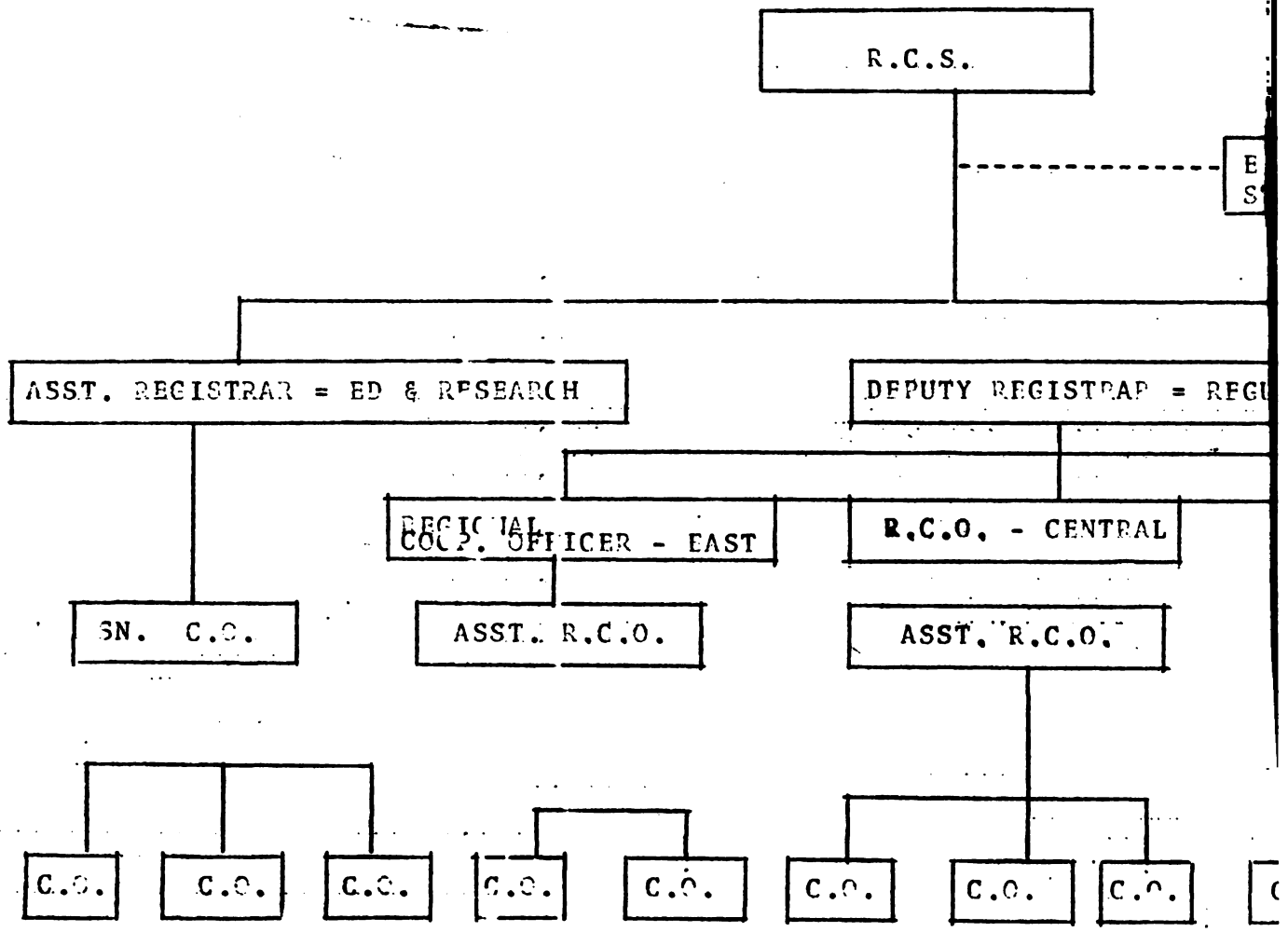
[

A P P E N D I C E S

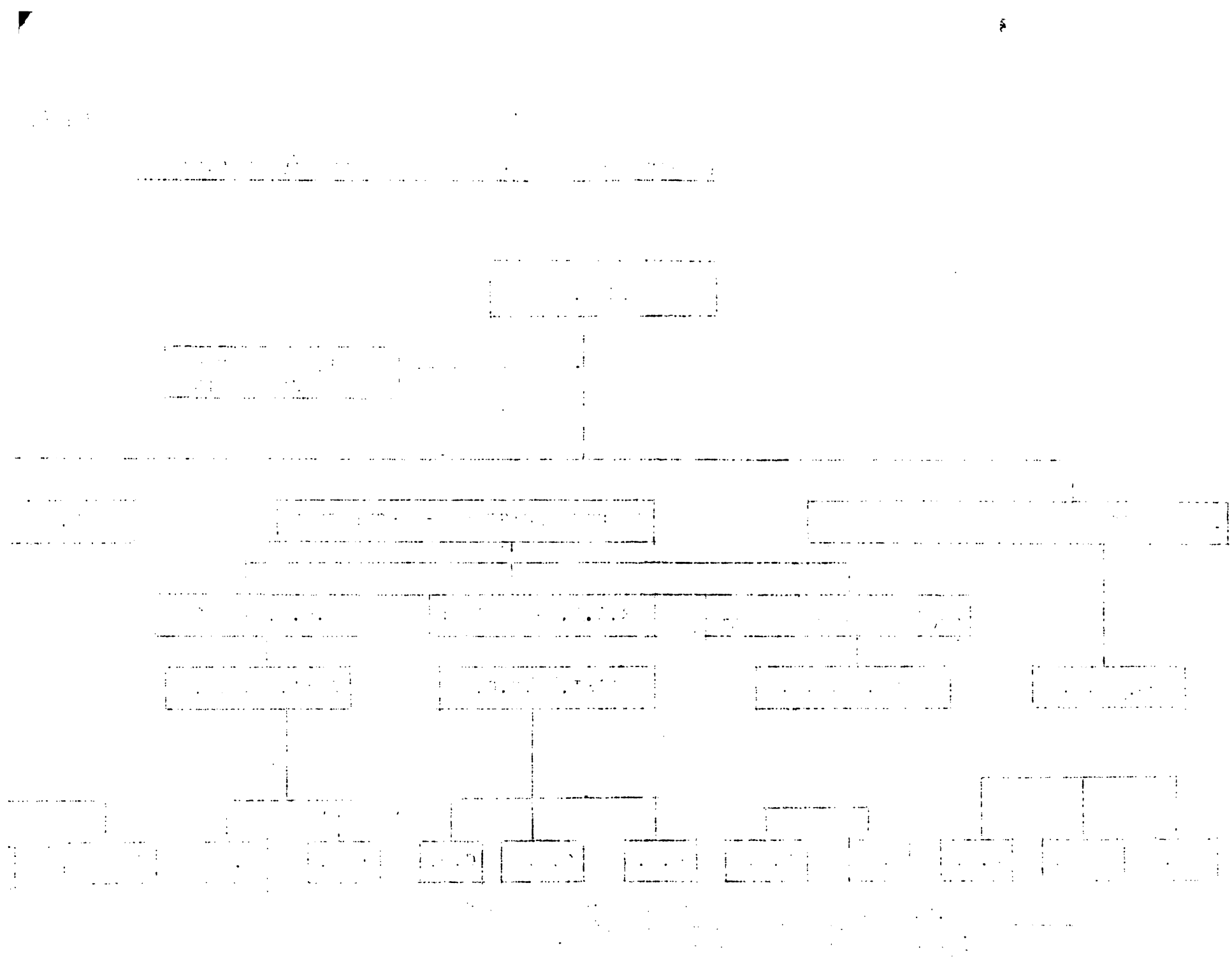
The projections made in this paper are based on the resources and input which are relevant to the Allsides Project. The main considerations relate to a project land area of 622 acres. Appropriate Appendices are attached as follows:

APPENDIX	I	Structure of the Co-operative Department
	II	Member's Individual Loan Account
	III	Farmer's Loan Requisition Order
	IV	Estimated Operational Expenses
	V	Estimated Capital Expenses
	VI	Capital Requirement (Stock)
	VII	Proposed Land Use for Allsides Project
	VIII	Estimated Crop Production
	IX	Estimated Livestock Production
	X	Estimated Income
	XI	Proposed Structure of Agricultural Co-operative (Western Region) and its Relationship to the Allsides Project.
	XII	Allsides Pilot Development Project

INTERNAL STRUCTURE OF THE CO



Legend: R.C.S. = Registrar of Cooperative Societies
R.C.O. = Regional Cooperative Officer
Sn.C.O. = Senior Cooperative Officer
C.O. = Cooperative Officer



APPENDIX II

MEMBERS INDIVIDUAL LOAN ACCOUNT

Membership No. _____ Lot No. _____

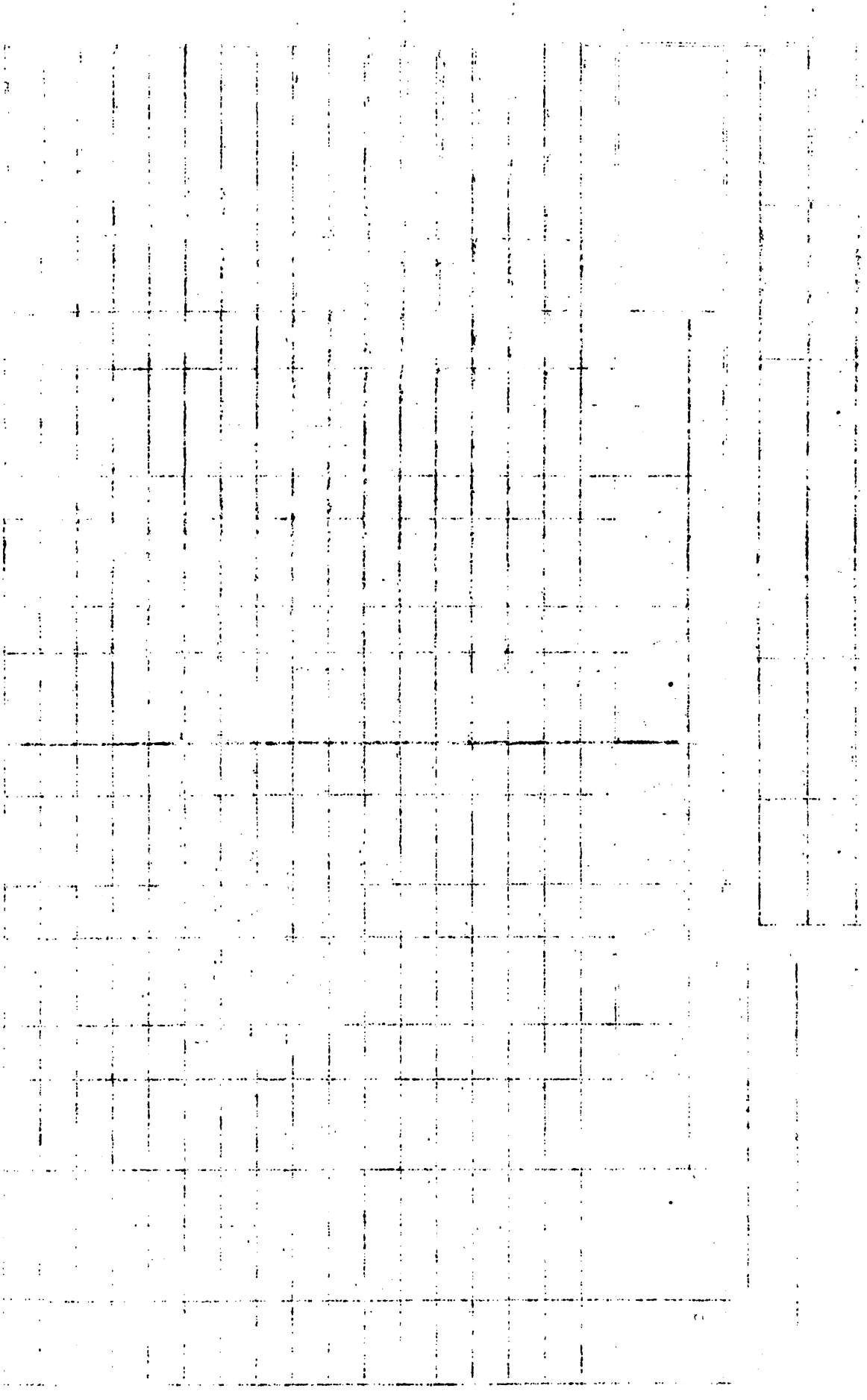
LOAN APPROVED:

Name _____

Address _____

No.	Date	AMOUNT	No.	Date	AMOUNT

Date	Voucher No.	LOANS						INTEREST						SIGNATURE OF RECEIVER
		Issued		Repaid		Balance		Amt. Due		Paid		Balance		
		$	¢	$	¢	$	¢	$	¢	$	¢	$	¢	



APPENDIX 111

FARMERS' LOAN REQUISITION ORDER

NAME OF FARMER: ..... DATE: .....

REQUIREMENTS

i. Cash Disbursement: $

ii. Planting Material

iii. Land Ploughing

iv. Agricultural Supplies

a)

b)

c)

d)

e)

f)

.....
Agric. Extension Officer.

APPENDIX IV

ESTIMATED OPERATIONAL EXPENSES ($)

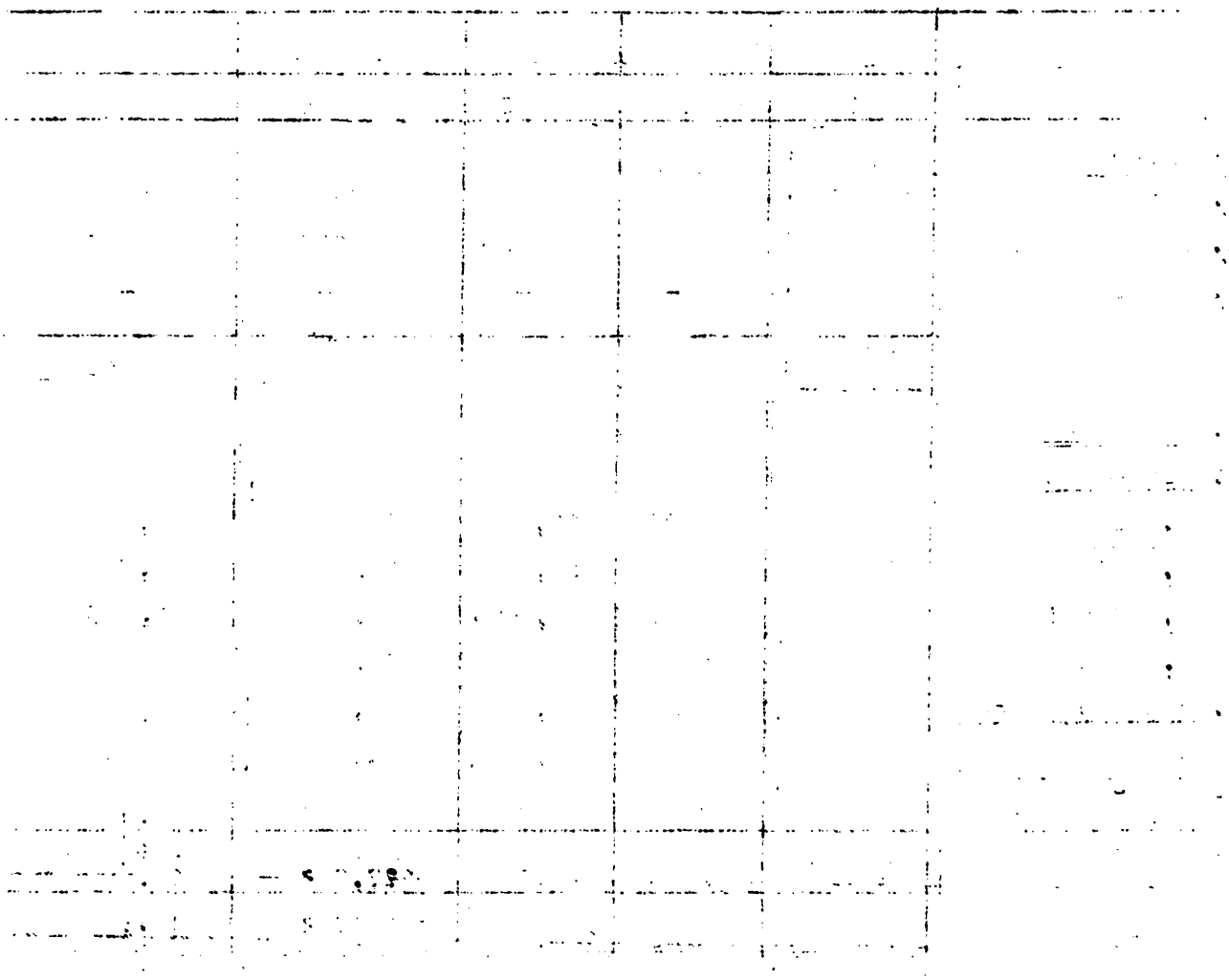
PARTICULARS		Y	E	A	R	S
	0	1	2	3	4	5
CROPS						
Yam	318,000.0	370,500.0	428,200.0	544,000.0	555,800.0	528,900.0
Irish Potato	-	10,285.0	12,342.0	16,456.0	20,570.0	24,684.0
Peanuts	-	4,700.0	7,520.0	11,280.0	11,280.0	14,100.0
Coffee	2,700.0	6,690.0	6,690.0	6,690.0	6,690.0	6,690.0
Red Peas	20,976.0	24,000.0	28,800.0	38,400.0	48,000.0	62,400.0
Banana	12,660.0	14,660.0	15,100.0	13,000.0	14,300.0	15,600.0
Forestry	5,500.0	1,650.0	1,650.0	2,200.0	1,650.0	1,650.0
Other	4,500.0	4,500.0	7,200.0	9,000.0	10,800.0	13,500.0
	341,180.0	436,985.0	507,502.0	641,026.0	669,090.0	667,524.0
Inflation Costs - 40% per year	-	174,794.0	203,001.0	256,410.4	267,636.0	267,009.6
	364,336.0	611,779.0	710,503.0	897,436.4	936,726.0	934,533.6
LIVESTOCK						
Feeds	30,372.5	63,886.4	109,028.4	154,917.7	177,003.9	235,663.3
Medicines	3,037.0	7,592.5	15,185.0	22,777.5	29,610.8	32,571.9
Misc. (10%)	1,518.5	3,796.0	7,592.5	11,388.8	14,805.4	16,286.0
SUB-TOTAL	34,928.0	75,274.9	131,805.9	189,084.0	221,420.1	284,521.2
Gross Expenses	399,264.0	687,053.9	842,308.9	1,086,520.4	1,158,146.1	219,054.0
Average Exp. per Farmer	1,728.4	2,974.2	3,646.3	4,703.5	5,013.6	5,277.3

APPENDIX V

CAPITAL EXPENDITURE

PARTICULARS	Y	E	A	R	S
	1	2	3	4	5
A. CROPS					
1. Yams	12000	20400	40800	27600	26600
2. Irish Potato	2600	3120	4160	5200	6240
3. Peanuts	270	-	-	-	-
	14870	23520	44960	32800	32840
B. LIVESTOCK					
1. Purchases					
a. Cows	8000	8000	10,000	10,000	10,000
b. Pigs	7510	14195	25,400	30,000	40,000
c. Rabbits	980	1800	1,800	1,800	1,800
d. Poultry					
2. Housing & Storage	32000	32000	48,000	64,000	48,000
3. Pasture Development	7000	7000	12,750	22,500	6,000
	55490	62995	97,950	127,300	115,800
Total	70360	86245	142,910	160,100	148,640

Purchase of poultry is regarded as an operational expense



APPENDIX V1

CAPITAL REQUIREMENT - STOCK

1.	Fertilizers	)	
2.	Spraying Material	)	
3.	Animal Feeds	)	
4.	Medicines	)	
5.	Building Material	)	$130,000.00
6.	Planting Material	)	
7.	Msicellaneous	)	

(a) Apportionment as to the quantity of each category to purchase will be the decision of the Manager, Committee of Management, and Advisors and based on the farmers needs and demands.

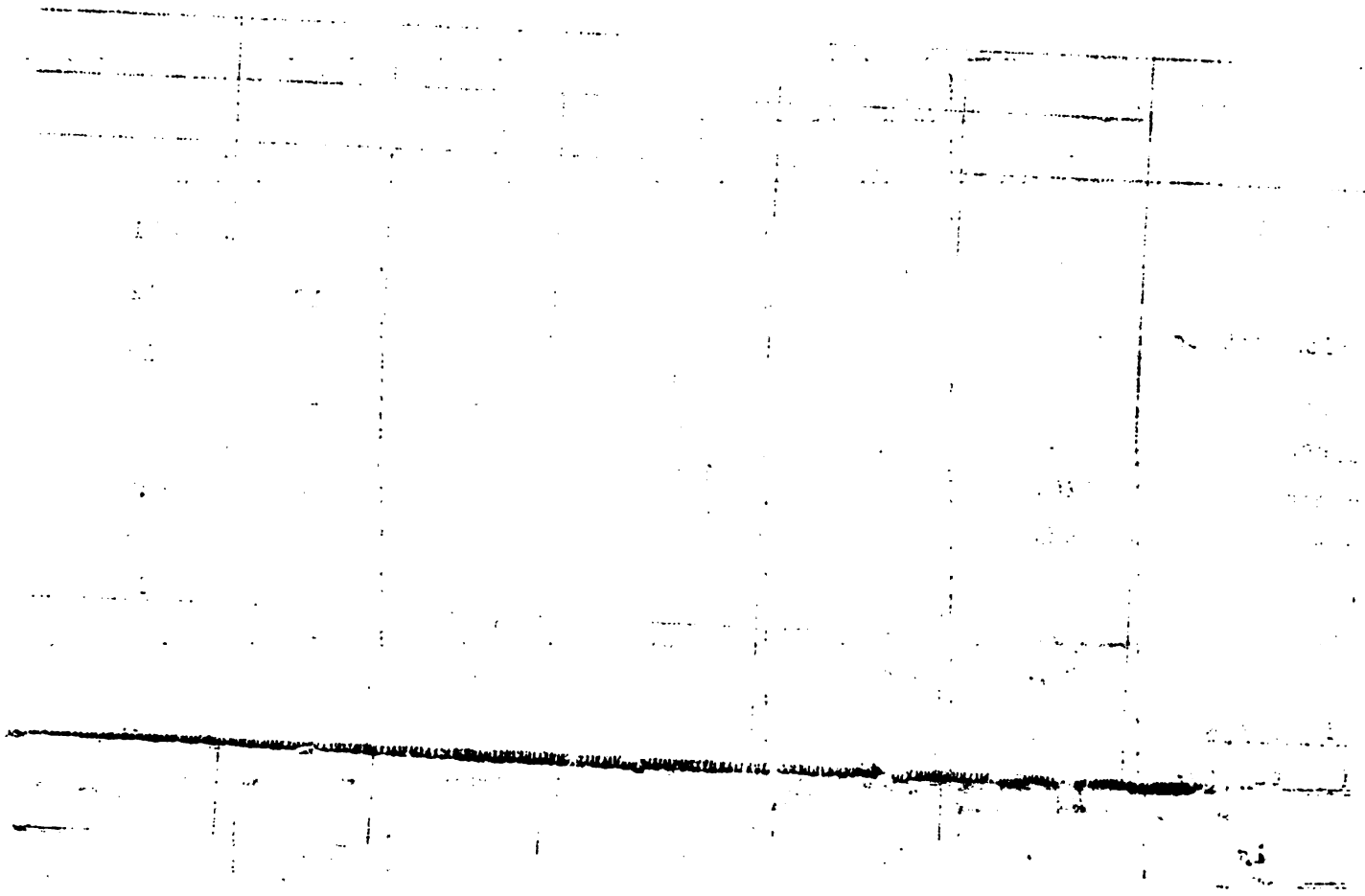
(b) Stock turn to average about three (3) times Annually.

APPENDIX V11

PROPOSED LAND USE (ACRES)

Particulars		Y	E	A	R	S
	0	1	2	3	4	5
Crops						
Yam	265	286	320	384	422	431
Irish Potato	-	5	6	8	10	12
Peanuts	-	5	8	12	12	15
Coffee	6	6	6	6	6	6
Banana	126.6	131	136	130	130	130
Red Peas	43.7	50	60	80	100	130
Forestry	10	3	3	4	3	3
Other	5	5	8	10	12	15
	406.6	425	467	528	567	579
Livestock (Pastures)	20	20	34	53	34	22
Totals	426.6	445	501	581	601	601

1. Total Acreage of Project Area is about 622 acres.
2. Uncultivable Areas (Drains, Gully Courses etc) = 21 Acres or Approx. 3.4% of total acres.
3. Irish Potato, Peanuts, Coffee, and Red Peas are intercultivated with other crops, hence their respective acreages are not included in the annual totals of the land use.

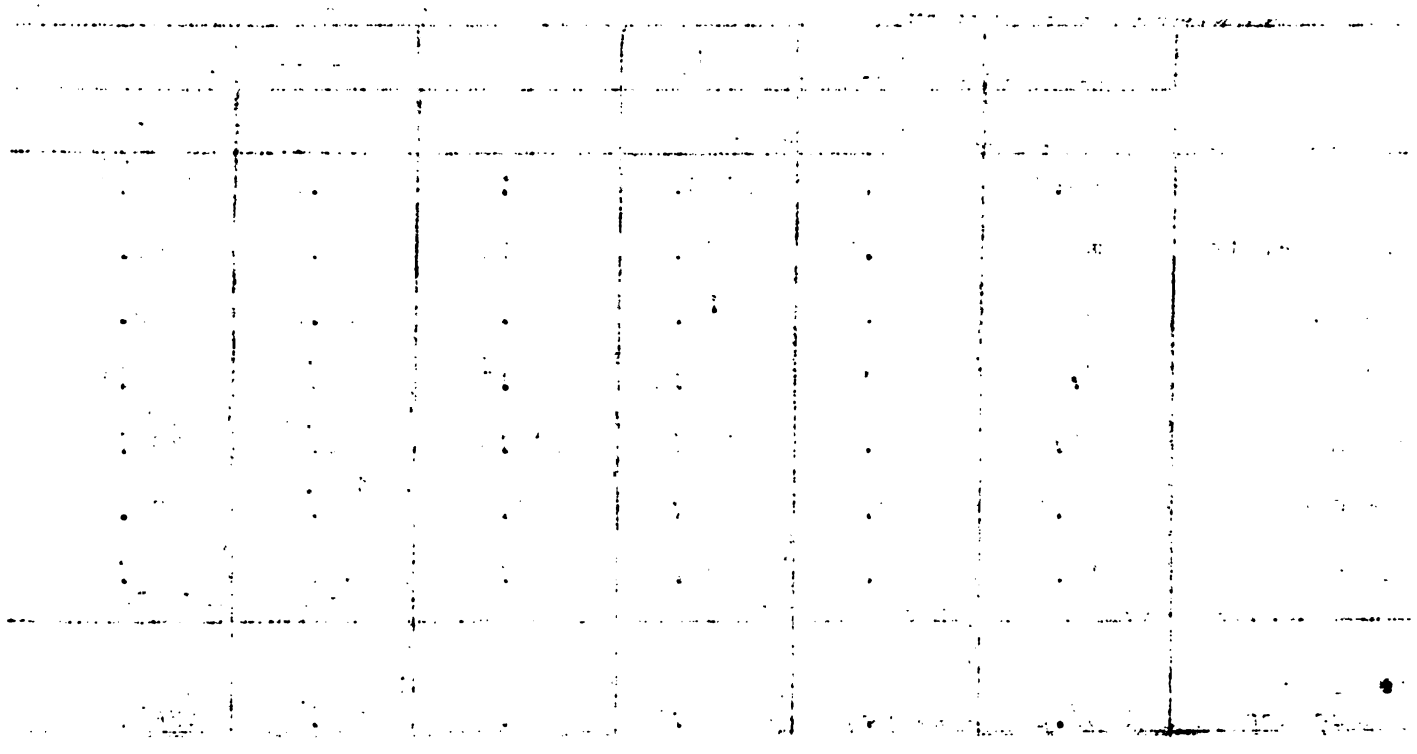


APPENDIX V111

ESTIMATED CROP PRODUCTION (TONS)

C R O P S		Y	E	A	R	S
	0	1	2	3	4	5
Yams	1650.0	1867.0	2193.6	2816.6	3327.5	3670.3
Irish Potato	-	25.0	31.5	44.0	56.0	67.5
Peanuts	-	7.5	12.6	19.8	20.2	25.3
Coffee	3.6	2.5	2.5	2.8	8.6	24.1
Bananas	230.5	248.9	272.0	325.0	351.0	390.0
Red Peas	* 4.0	50.0	60.0	80.0	100.0	130.0
Other	15.0	15.4	25.9	34.7	44.8	61.0
Total Production	1903.1	2216.3	2598.1	3322.9	3908.1	4368.2

*Heavy losses due to Mosaic disease.

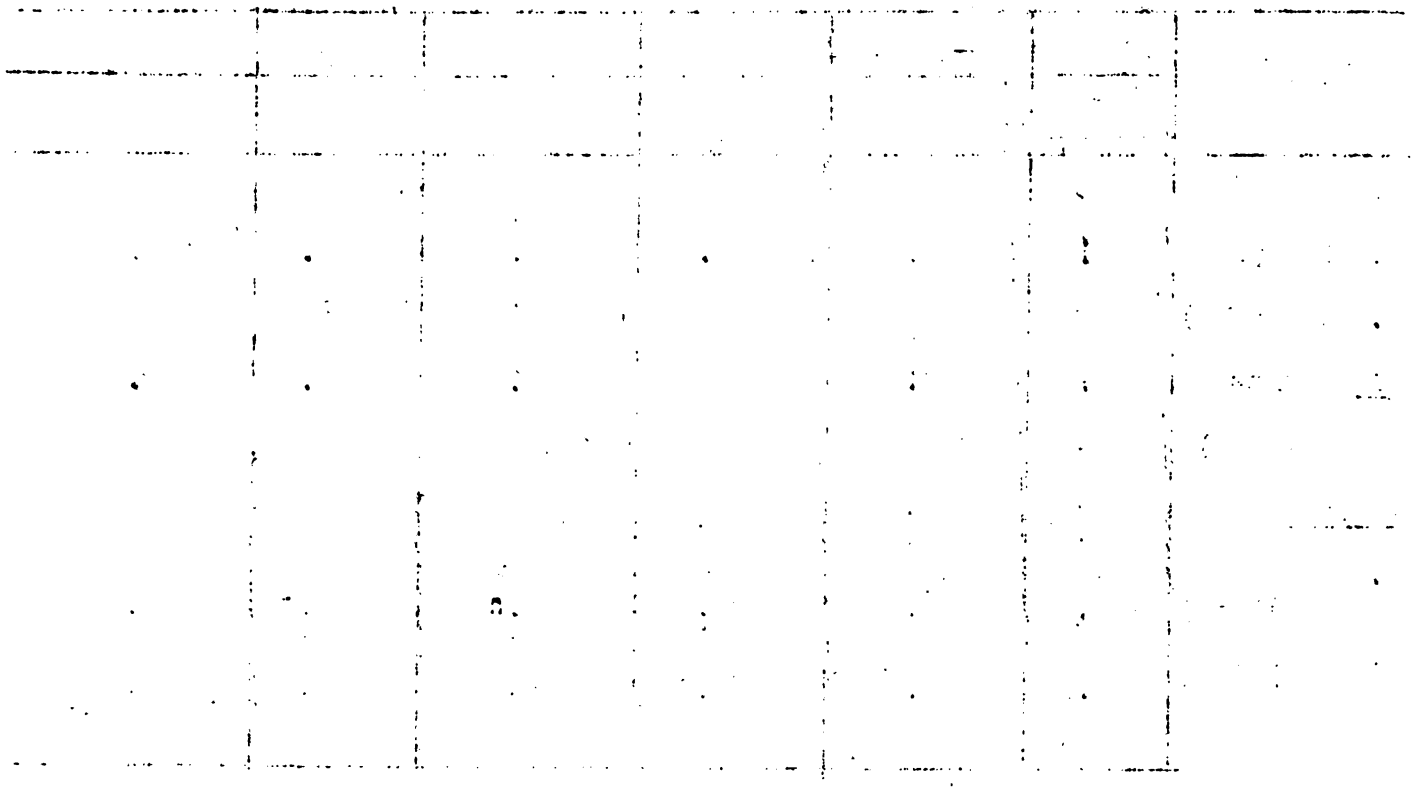


APPENDIX 1X

ESTIMATED PRODUCTION - LIVESTOCK

LIVESTOCK		Y	E	A	R	S
	0	1	2	3	4	5
Cows						
a. Milk (tons)	26.8	52.5	72.0	90.0	107.5	138.0
b. Calves(no)	50	60	60	70	80	90
Pigs (tons)	2.3	7.4	16.3	24.7	28.6	38.6
Rabbits (No)	-	220	660	1200	1650	2450
Poultry						
a.Layers (eggs)(doz)	5251.4	15120.0	20800.0	24120.0	27600.0	35280.0
b. Broilers (tons)	6.1	24.0	30.0	36.0	42.0	48.0

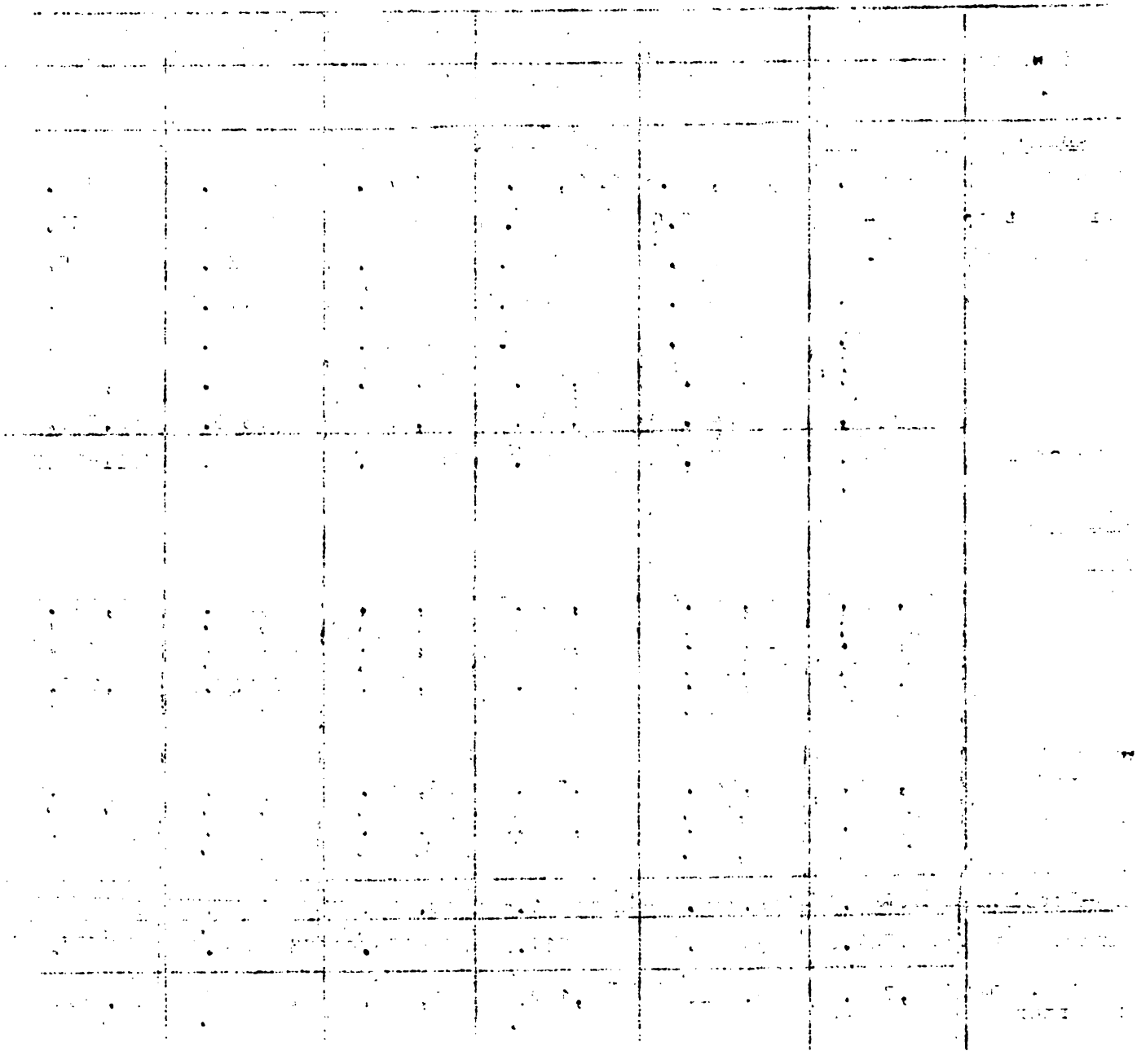
1 Quart Milk = 2.5 lbs.



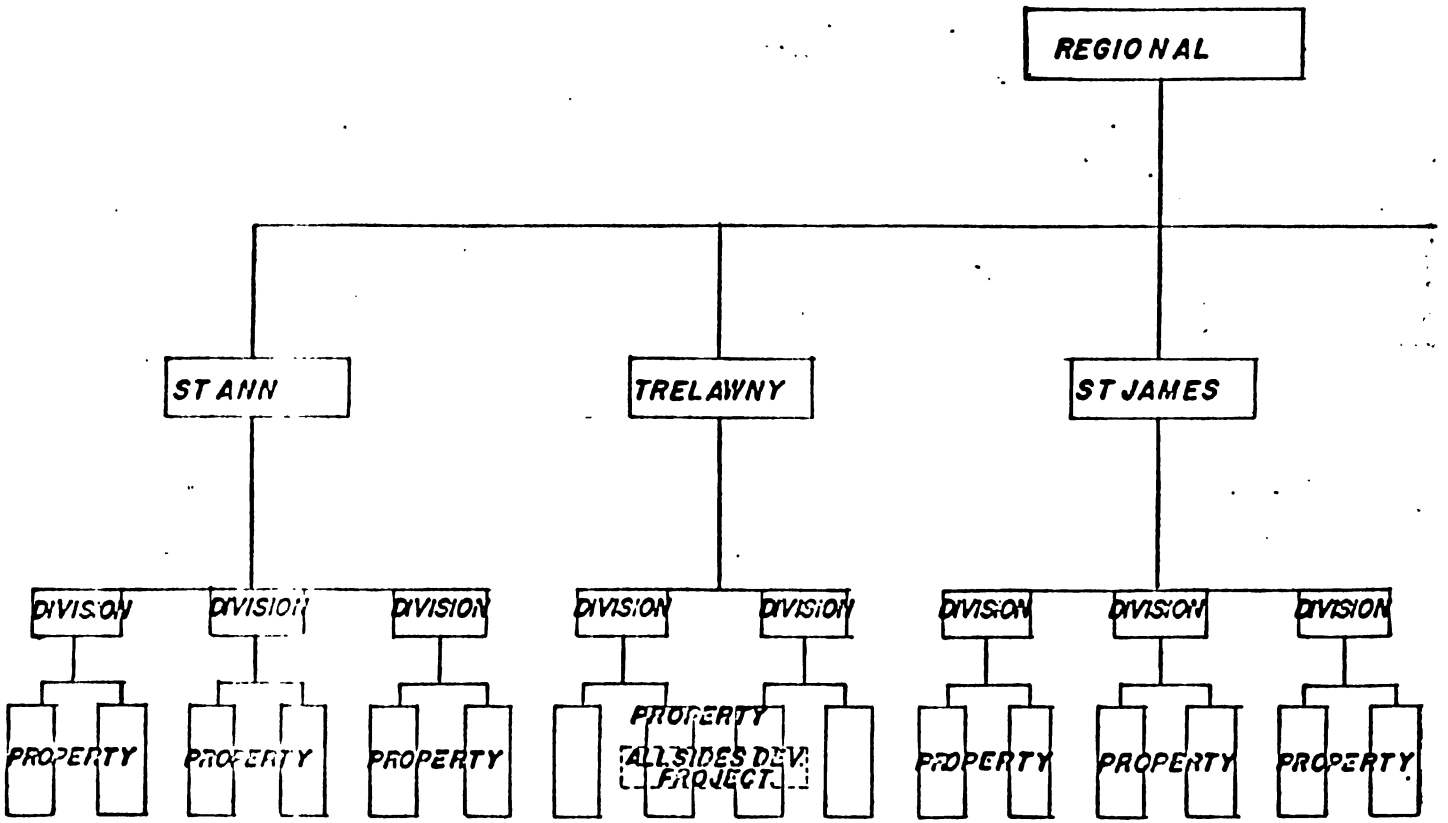
APPENDIX X

ESTIMATED INCOME ($)

Particulars		Y	E	A	R	S
	0	1	2	3	4	5
CROPS						
Yams	624898.3	1,120,290.6	1,316,160.0	1971648.0	2329229.0	2936317.0
Irish Potato	-	1500.0	18900.0	26400.0	39200.0	47250.0
Peanuts	-	8250.0	13860.0	21780.0	23230.0	29095.0
Coffee	3839.8	2666.5	2666.5	2986.5	9172.3	25616.3
Banana	27675.0	31332.5	34000.0	40625.0	45630.0	50700.0
Red Peas	12707.3	200,000. 0	270,000. 0	400,000.0	525,000.0	780,000.0
Other	9000.0	9240.0	15,540. 0	20,820.0	31,360.0	42,700.0
Sub-Total	678120.4	1386779.6	1671125.5	2484259.5	3002821.3	3911678.3
LIVESTOCK						
COWS						
Milk	11,809.0	30,660.0	42,048.0	52,560.0	72,240.0	92,736.0
Calves	7,872.6	11,400.0	13,200.0	17,500.0	20,800.0	25,200.0
Pigs	3,936.3	24,749.4	54,383.6	82,715.1	103,207.1	145,130.7
POULTRY						
Layers	6,301.7	18,144.0	24,960.0	28,944.0	34,776.0	44,452.0
Broilers	9,443.5	57,800.0	66,000.0	79,200.0	96,600.0	110,400.0
Sub-Total	39,363.1	142,753.4	200,591.6	260,919.1	331,623.1	417,918.7
Gross Income	638,757.3	1529533.0	1871717.1	2745178.6	3334444.4	4329597.0
Average Income per farmer	2,765.1	6,621.3	8,102.6	11,883.8	14,434.8	18,742.8

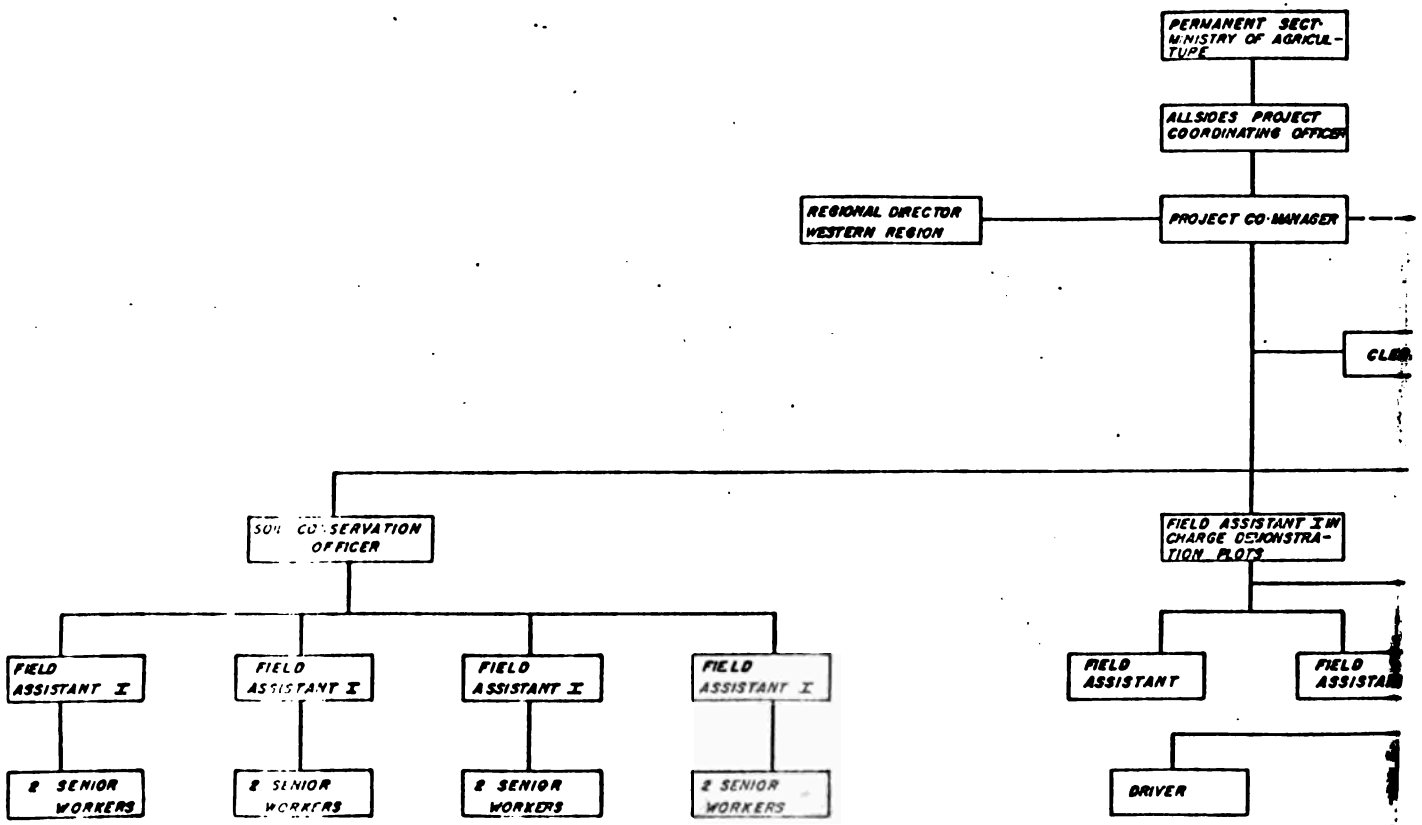


PROPOSED STRUCTURE OF AGRICULTURAL C AND ITS RELATIONSHIP TO THE ALLSIDES PROJECT.



ALLSIDES PLOT DEVELOPMENT PI

ORGANIZATION CHART



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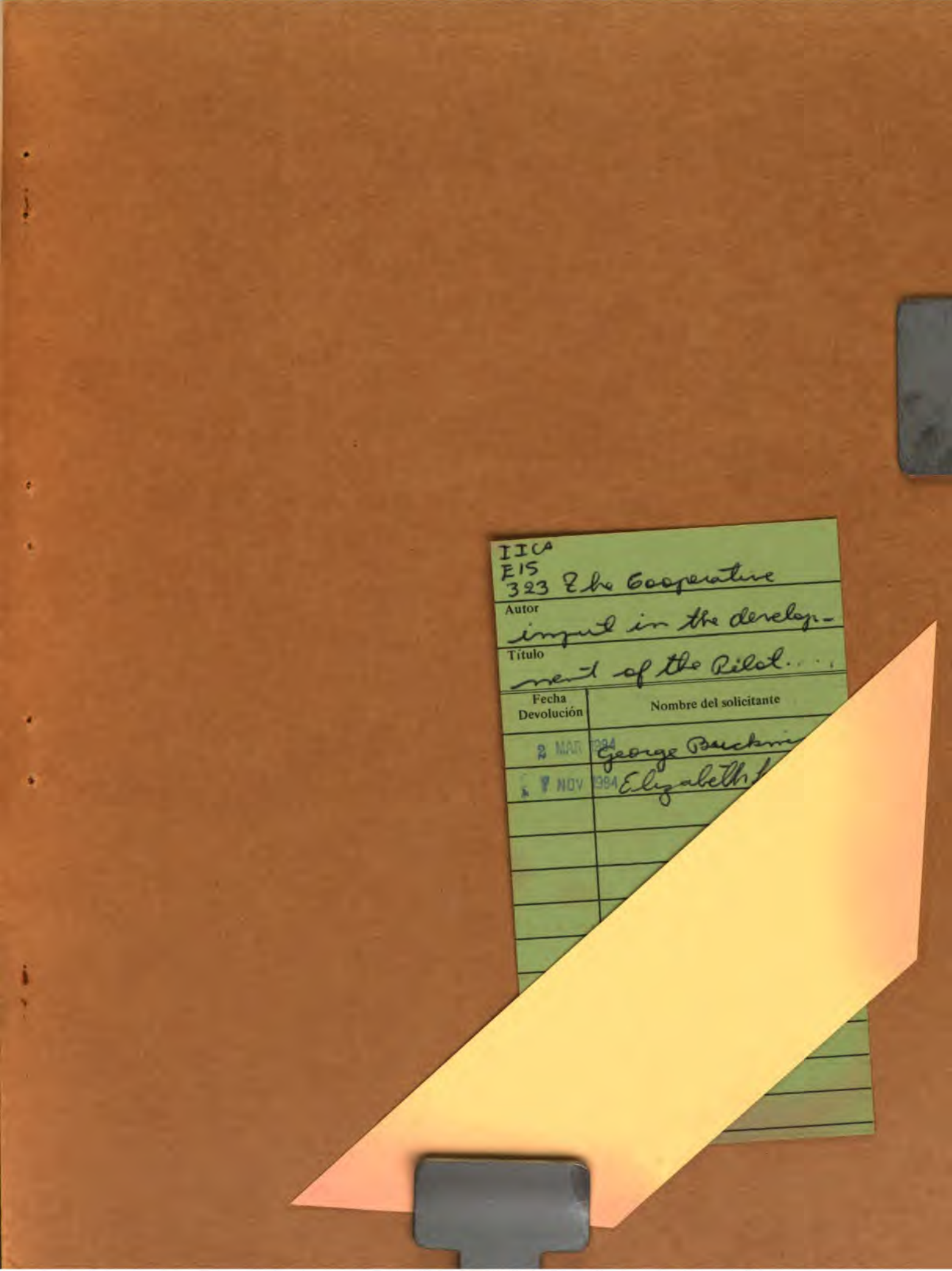
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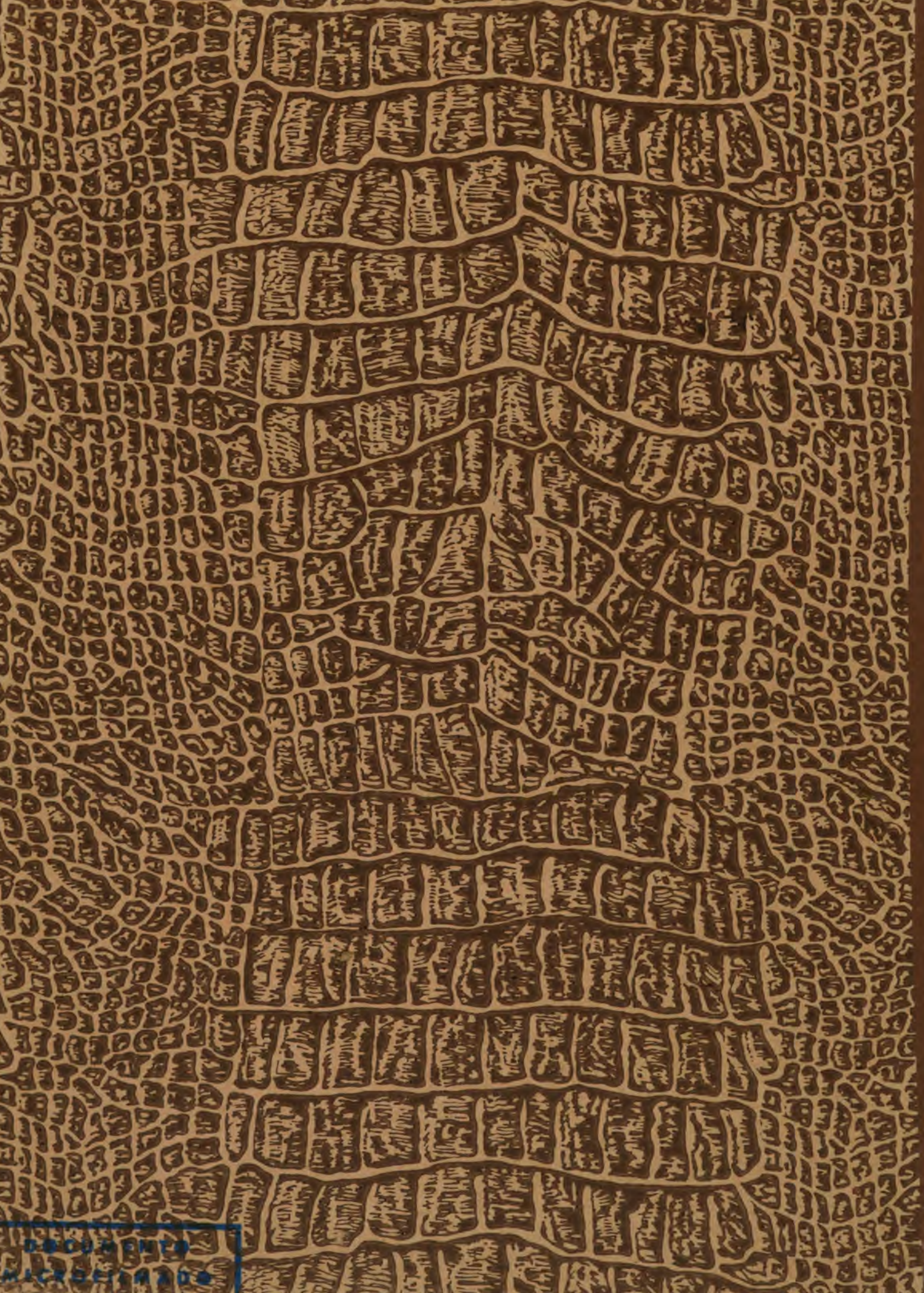

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