DEMOGRAPHIC ANALYSIS OF SAVINGS AND CREDIT

A case study of Ukulima Savings and Credit Society

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This project is submitted in partial fulfilment of the requirement for the postgraduate diploma in population studies of the University of Nairobi.

September, 1987

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DECLARATION

This project is my original work and to the best of knowledge has not been presented for a degree in any other University.

Signature

A.A. ODHIAMBO

This project has been submitted for examination with my approval as a supervisor.

Signature

21/10/87

DR. J.A.M. OTIENO
ACKNOWLEDGEMENT

I would like to register my great appreciation to the University of Nairobi for enabling me to take up the postgraduate diploma course. Special thanks to the sponsor of the programme, Ford Foundation for the generous funds which made this course possible. The staff of PSRI were of invaluable help especially Dr. Ottieno who spent his valuable time in supervising the project. I also thank my two research assistants who helped in data collection.

I acknowledge the encouragement and support from my family and friends and my colleagues for the conducive atmosphere. Last but not least to Miss. Caren A. Okech who typed this work.
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1.1 BACKGROUND INFORMATION

This paper will attempt to determine the duration of a membership in Savings and Credit Societies Taking Ukulima Savings and Credit Society as a case study. This will be mainly a Kenyan experience.

The cooperative movement in Kenya started in 1908, principally for marketing of Agricultural produce by the European settlers having surplus crops for sale. For twenty years that followed, the movement expanded but significantly remained principally European in nature with negligible participation by the Africans.

Efforts to extend the movement among the Africans started in 1944. An expert on cooperative matters was invited by the colonial government to study the operations of the cooperatives, and give recommendations. Upon the recommendations the department of cooperatives was set up with the responsibility of promoting and supervising the development of the movement. In 1945 a registrar of cooperatives societies was appointed. This was the beginning of interest in the movement by the African farmers. Between 1946 and 1947, 200 cooperatives came into existence. And by 1958, the number of cooperatives had increased to 400 Farmer Cooperative Societies. By 1983 the number reached 2,186 with a membership of 1.8 million. Today the membership has reached a peak of 2 million, with 2,500 active cooperative societies. This is about 13.5% of the total population.

However, it was not until 1964 that the first two savings and credit societies were registered. By 1984 the number had soured upto 1,022 with a membership of 600,000, and accumulated savings of KShs.2,700/= million and KShs.2,200 million outstanding loans to members. By the end of 1985, the figure had reached 640,618 with accumulative share contributions of KShs.3,300,000.
The emergency and growth of savings and credit societies after independence has been a spectacular feature of cooperative movement growth; from the Agricultural Cooperatives hardly rural based to urban based. To date there are 927 active savings and credit societies with 700 of them in Nairobi alone. The membership is 484,068.

The primary objective of savings and credit societies (SACCOS) is to provide savings and credit facilities to its members. Through the SACCOS the low income earner is given an opportunity to save and borrow on easier terms than those offered by known financial institutions and Commercial banks for various purposes. The terms of credit are softer as no collateral security is needed as the shares and guarantor are the securities needed.

In general the cooperative sector plays a very important role in the economic development of Kenya. It contributes about 50% of Kenya's Gross National Product (GNP) and affecting directly or indirectly the livelihood of half of the country's total population.

1.2 STATEMENT OF PROBLEM

Savings and Credit Societies in Kenya are formed with the primary objective of providing Savings and Credit facilities to its members who are both in rural and urban areas.

These loans have been put into various uses like paying school fees, building of houses, starting business etc. Currently, the repayment period for loans is a maximum of 48 months. It is not known for sure how long a member stays in the society and so the 48 months repayment period was arrived at arbitrary without any guiding facts.

It is necessary to know on average the length of stay in the society by a member so that the repayment period of loans
The findings and conclusions of this study will be useful to those given the responsibility of supervising the operations of Cooperatives; mainly the Ministry of Cooperative Development and especially in determining the maximum period for loan repayment. The expected length of stay should help investment plans of societies.

One very important reason for this study is that it is possible to use the life table technique in the analysis of data at hand.

1.3 JUSTIFICATION

In view of the importance and contribution cooperatives make to the economy of Kenya, it became necessary to carry out such a study. However, because of the time constraint it was not possible to carry out a broad spectrum study involving numerous societies. The study considers and concentrates only on one savings and credit society namely Ukulima Savings and Credit Society with a membership of approximately 40,000 people.

No similar study has been done although other scholars have used the life table technique in other studies. Lukhando (1985) used the same technique in the analysis of NSSF withdrawals and survivors.

1.4 OBJECTIVES

The study will attempt to ascertain the following:

1. The average age at which people join savings and credit societies.
2. The withdrawal and survivorship rates.
3. Interpret the functions of the life table columns.
4. Pattern of contributors and discuss reasons for withdrawing.
5. Determine the life expectancy (the average length of stay)
6. Find any policy implications and recommend improvements for savings and credit societies.

1.5 SCOPE OF THE STUDY

The major source of data was secondary because of the time constraint and financial implications of collecting primary data. The data required was obtained from file records of individual members of Ukulima Savings and Credit Society. These individual members were randomly sampled. The sample population was 500 members regardless of sex. The total population for the whole society is 40,000 members.

Research coverage included only those members randomly sampled and their characteristics traced in their individual files. This helped in determining the date of joining the society and sex of the member. It was also done to record the age at entry which became useful in determining average age at entry into the society, which is the basic information required at stage one. The same member was traced in the funds register to determine the date of withdrawal which again became useful in grouping into duration period. This period covered was between 1982 and 1984 for entry and upto 1987 for withdrawal cases. It was not possible to go further back because of time constraint and unsystematic manner in which records were kept prior to 1981.

1.6 LITERATURE REVIEW

Literature available on Savings and Credit Societies are enormous but most of them concentrate on its contribution to the national development, the historical evolvement and their efficiency and management.

In Africa, Cooperatives emerged hand in hand with trade unions essentially as a tool to liberate the African from the yoke of colonialism and also to improve their standards of living.
G. Hyden (1963) writes that both trade unions and cooperatives played an important role in the struggle for independence in many African countries. While the church organisations tried to remain neutral or in some cases even supported the colonial authorities to contain the forces of administration both trade unions and cooperatives were often in the forefront of the struggle. He concludes that for progress to come about, Africans must look for an indigenous approach which is cooperatives.

While this was true for the African countries, the emergence role of cooperatives in developed countries took a different shape. The first cooperatives in Germany were formed in 1849 when unemployment was at its peak. Crops failed because of severe drought. Money lenders took the opportunity to lend money to the poor at very high interest rates. One mayor of Flammersfield, Mr Raiffeisen mobilised his subjects to pull meager resources and lend to each other at low interest rates. This became very successful and because of the common bond they had people's character was the most important security.

In Italy the cooperative was under the leadership of Luigiluzzatti. In Belgium (1848) Savings and Credit Societies was like self help group instead of charity as a means of solving monetary problems of the poor. The present principle governing cooperatives was pioneered by the Rochdale Brothers, and they are:-

a) Open membership to all within the common bond.

b) Limited dividends on share capital.

c) Democratic control i.e one member one vote.

d) Practical and religious neutrality.

e) Ownership and control by the member.

f) Cooperation among cooperators at local, national and international levels.

g) Continuous education to all members.
Savings and Credit Societies are established with primary objectives of enabling members with a common bond to save regularly together for the purpose of creating a pool of funds from which those members can obtain credit facilities on softer terms than would be available in the prevailing market situations.

The Ministry of Cooperatives Development (1983) argues that if the above principle objective is true, then the existing loan policy and policy on a 20% cash reserve contribute to the fact that considerable funds are available which cannot or can only for a short period be lent to members. The result is that not all members get the loans when they need them leading to being dissolved with the society. This is one reason given frequently by members for withdrawing from the society.

Efficiency and management problems have also led to many members withdrawing from the society. Goran Hyden (1973) states that many cooperatives societies have suffered from lack of proper management and leadership. In Europe urban cooperatives have been such an important social and economic organisation but is still weak in Africa. They have often suffered from being too small. They have usually been formed among urban residents of a particular geographical area. Lately persons with similar economic background have joined together to form cooperatives purely as a source of credit for various activities having no strong binding obligation.

The Sessional Paper No. 8 of 1970 stressed on the efficiency of Cooperatives. It stated that it was important that they must be efficient before there was any question of the government giving them a more significant role in the Kenyan economy. The situation has changed now and cooperative is seen as a way of indegenizing the economy.
Until 1986 there existed no formal policy on Savings and Credit Societies. But as early as 1965 in the Sessional Paper No. 10 on African socialism, it stressed that the need for mutual social responsibility in development is great. It also attaches to cooperatives a special role in rural development as they have direct roots in African tradition.

Kenya's development plan 1966 - 70 goes further to state that the contribution by cooperatives will be made through expansion of agricultural credit and the technological progress associated with it. The plan also announced extensive measures to strengthen the cooperative movement and make it self supporting.

This is only possible if efficiency and good management is adhered to. The late Mr Tom Mboya summarized the problems facing cooperatives as follows:

i) dishonesty, fraud and favouratism in the management

and

ii) lack of understanding on the part of societies to recruit competent staff at competitive salaries.
When a member joins the society he fills an application form which requires him to give personal details like date of birth, date of first appointment into service, intended share contribution and duty station where all official correspondence can be made through.

Members of Ukulima Savings and Credit Society are employees of the Ministries of Agriculture, Livestock Development, Water Development and other agricultural related parastatals like Tana and Athi River Development Authority, Agricultural Development Corporation. Membership is nationwide. Every month the Ministries and Parastatals concerned remit to the society's account the agreed share contributions of each member and any loan repayments and interest accrued. This is done through the check-off system. The amount is reflected in the members pay-slip which is sent every month to the member by the salary section of the Ministry concerned.

In the event that a member wishes to withdraw from the society, it is mandatory that the society is given 60 days notice in which case a cheque will be prepared for the member giving him his dues. Any loan outstanding will be deducted.

In obtaining the necessary data for this project, an attempt was made to extract data relating to age from the personal files of those randomly selected. It was also possible to extract the exact year a particular member withdrew from the society and then to determine the duration period of the member.
2.2 METHODOLOGY USED IN THE COLLECTION OF WITHDRAWAL STATISTICS

When a member decides to withdraw from the society, he writes a letter of withdrawal giving the exact month and year he ceases to be a member of the cooperative society giving 60 days notice.

To get withdrawers the refunds register together with the individual personal files was studied and those members who were selected are traced in the refunds register to ascertain whether they are among them. Should any of them be included we go back to the file and look for the date of the cheque and check in the file for reason given if any for withdrawal. However, it was found that these reasons were not given. But where a member could not be traced using the above method, physical checking was resorted to. The data utilised in the study cannot be said to be 100% reliable because of the following reasons:

- Mistatement of ages: Because these members are employees of Public Sector, it is possible that some of them in the attempt to delay their retirement from the civil service which is mandatory at 55 years, some of the members could have reduced their ages in the identity card. This could be common among the male members than females because men are known to be traditionally bread earners.

- Misallocation by ages: For those members who withdraw and then rejoin the society again, they are considered as new members when rejoining. This tends to inflate the age at entry sometimes to as high as 50 years.
2.3 METHOD OF DATA ANALYSIS

The method used in the analysis of data in this study is the Life Table technique and the underlying assumption is that the only cause of exit from the society is withdrawal.

In this study the different columns of the life table are assigned some meanings are understated:

\[ ndx \] - The actual number of withdrawers from the society between \( n \) and \( x + n \) months.

\[ nqx \] - the probability of withdrawing from the society between \( x \) and \( x + n \) months.

\[ lx \] - the radix in this case 100,000 is chosen, the subsequent figures gives the remaining number of months between \( x \) and \( n + x \)

\[ nLx \] - total person months lived in the society

\[ Tx \] - cumulative number of months in the society

\[ ex \] - the life expectancy in society.

The essence of this paper was to use the Life Table technique to analyse the data at hand. In most cases the technique is used to study morality and its effect on population. It can also be used by a variety of specialists in a variety of ways, for example by Public Health Workers, demographers, actuaries and many others in studies of longevity, fertility, migration and population growth as well as making projections of population size and characteristics.

Briefly, the Life Table is the history of a hypethetical population (cohort or group) as that population gradually
diminishes by death following a pre-determined schedule of probabilities of dying.

In the present study the members of Ukulima Savings and Credit Society provide the demographic data. Death is analogous with withdrawal as this is the only means of exit from the sample population. The nqx in this study will be the probability of withdrawing at each stage. The life expectancy will be interpreted to mean the average length of stay of a member in the society. The assumptions for the model are:

1) that the cohort is 'closed' against in or out migration that is, the population does not decrease on increase due to external factors.
2) that the probability of withdrawing is fixed by duration and does not change.
3) that there is a standardized base within the table.

The first assumption under normal circumstances cannot be true because withdrawal is not the same as death. A member under normal circumstances can have another chance of rejoining the society more than once while death actually occurs only once a life time.

3. ANALYSIS
3.1 LIFE TABLE CONSTRUCTION PROBLEMS:

Because of the time limitation it was only possible to use a sample of 500, which to say the least is a very small one.

Even the number of withdrawers in the sample were too few (38) to enable this project reach any conclusive presentation.

The value of the model in the present context rests upon its utility in displaying data related to duration in the cooperative and not to the members per se. Unfortunately, it was not possible to get any meaningful data on social and
demographic characteristics apart from the sex of the member. It was only possible to know occupational status of members and it was clear that 75% of the sampled population turned out to be non professionals and semi-professionals like subordinates, secretaries and copy typists.

Aside from the above shortcomings more serious shortcomings was that of infidelity and accuracy which often characterize such record keeping. The technique has got several advantages just to mention some of them:

1) they do not require detailed information about the population which is standardized.

Actual Construction:

The withdrawals again are analogous with deaths, and this forms our ndx column.

A radix of 100,000 was chosen which formed the lx column. From here it was possible to obtain the nqx column.

From here all the other columns were derived.

4. DISCUSSION OF FINDINGS

The completed abridged life table allow us to make general statement concerning duration in the society.

Pattern of Contribution

From the sample, it was found that most people join the society at age 24-26. There could be several explanations to this. Either the length of time spent in schools and colleges have increased or after getting employment people take some time settling down and learning about the
organizations before they eventually join the society.

WITHDRAWAL LIFE TABLE FOR UKULIMA SAVINGS & CREDIT SOCIETY
(1981 - 87)

<table>
<thead>
<tr>
<th>Duration (In months)</th>
<th>ndx</th>
<th>nqx</th>
<th>.nlx</th>
<th>.nlx</th>
<th>Tx</th>
<th>ex</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-9</td>
<td>4</td>
<td>0.00004</td>
<td>100,000</td>
<td>99998.0</td>
<td>899827</td>
<td>8.99827</td>
</tr>
<tr>
<td>10-14</td>
<td>7</td>
<td>0.00007</td>
<td>99996</td>
<td>99992.5</td>
<td>799829</td>
<td>7.99861</td>
</tr>
<tr>
<td>15-19</td>
<td>2</td>
<td>0.00002</td>
<td>99989</td>
<td>99986.5</td>
<td>6999836</td>
<td>6.99913</td>
</tr>
<tr>
<td>20-24</td>
<td>5</td>
<td>0.00005</td>
<td>99984</td>
<td>99983</td>
<td>5999850</td>
<td>5.99946</td>
</tr>
<tr>
<td>24-29</td>
<td>2</td>
<td>0.00002</td>
<td>99982</td>
<td>999815</td>
<td>499867</td>
<td>4.99957</td>
</tr>
<tr>
<td>30-34</td>
<td>1</td>
<td>0.0001</td>
<td>99981</td>
<td>99977.5</td>
<td>399885.5</td>
<td>3.99961</td>
</tr>
<tr>
<td>35-39</td>
<td>7</td>
<td>0.00007</td>
<td>99974</td>
<td>99972.5</td>
<td>299908</td>
<td>2.99986</td>
</tr>
<tr>
<td>40-44</td>
<td>3</td>
<td>0.00003</td>
<td>99971</td>
<td>99969.5</td>
<td>199935.3</td>
<td>1.99999</td>
</tr>
<tr>
<td>45-49</td>
<td>3</td>
<td>0.00003</td>
<td>99968</td>
<td>99968</td>
<td>99966</td>
<td>0.99998</td>
</tr>
<tr>
<td>50+</td>
<td>4</td>
<td>0.00004</td>
<td>99964</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
There is no significant difference between males and females in regards to age at joining the Society.

Females on average join at ages of 23 - 25.

**Life Table Analysis**

It was shown that after 9 months in the society, the chances of withdrawing is lowest, increasing steadily with length of duration in the society. Upto about 35 months, the probability of withdrawing is again highest.

The average length of stay (life expectancy) in the society is about 9 years which is highest at the time of joining the society.

Once again, the emphasis here is that my research has not yet progressed far enough for me to give conclusive presentation but it has soon become obvious to justify some generalisations, which in turn has been supported by some relevant figures from the available statistics.

**5. SUMMARY AND CONCLUSION**

As set out in my objectives the study has revealed that the average duration of withdrawers is approximately 9 years of membership. However, it is worthy to note that membership duration could be higher than 9 years. So the policy of loan repayments of 48 months is quite adequate.

The study has achieved the objectives as set out.
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