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A Survey on Need for e-Pension Service in Kerala

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ABSTRACT: e-Pension application is the result of major process reengineering benefitting senior citizens. It involves complete change in the pension disbursement system for pensioners. The web interface enables the pensioners to know the status and details of their monthly pension through Internet where complete pension detail for the last 12 months is available.

KEYWORDS: e-Pension, scroll.

I. INTRODUCTION

The state government pensioners in the state is receiving their pension through treasuries and banks as per the options exercised by the pensioners. The system of payment of pension to the state government pensioners prior to 2006 (termed as old system hereinafter) utilized the reach of banks as bank branches are present throughout, even in remotest of the locations in the state.

In order to remove all the problems of old system, pension disbursement should be computerized through the e-pension system. The option given to pensioners to draw their pension from treasuries should be withdrawn. All pensioners drawing pension from treasuries should be shifted to the banks. All pensioners shifted from treasuries should open accounts in authorized bank branches. After crediting bank accounts of the pensioners, paying branches return the scroll through link branches to district treasuries for entering into the accounts. All the necessary certificates continue to be taken by bank branches. These are then sent to District Treasury along with scrolls.

II. RELATED WORK

The literature survey included the journals, The Global reforms of public pension system and Indian Pension System: Problems and Prognosis. The first paper provides a descriptive and introductory overview of issues driving the initiatives to reform public pensions in the international arena. The second paper reviews the state of the Indian pension system in 2003. The Indian experience could potentially influence policy decisions in other developing countries, especially those with similar reliance on the national provident fund system. All these are explained below.

[1] The provision for the security and welfare of the elderly has been a concern for societies throughout history. Most cultures developed traditions of respect for the old that prompted informal arrangements for their care. However, the need for formal arrangements for the provision of old-age security became increasingly essential in the wake of the Industrial Revolution, the decline in agrarian populations relative to urban centre populations and the erosion of extended family structures. The consequences of these demographic and economic changes that arose in the mid- to late-1800s created segments of the U.S. population that were ill prepared to cope with the economic calamities of the 1930s that produced rampant unemployment and plunging asset values. The objective of this paper is to provide a broad look at some of the forces driving pension reform issues around the world and to convey the major elements of reforms and reform proposals that were implemented or advocated in Chile, the U.K. and the U.S. The article is by no means exhaustive and should rather be viewed as a descriptive and introductory overview of issues driving the discussions about the reform of public pensions in the international arena. The first point is that the challenges raising concerns about the currently configured U.S. Social Security system are common to many countries around the world. A second point of the description provided in the text that hopefully is evident is that in the face of demographic and financial challenges straining public pension systems, policymakers around the world have acted.



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[2]A variety of problems plague the pension system in India. The gradual collapse of the traditional old age support mechanisms and the rise in elderly population highlights the need for strengthening the formal channels of retirement savings. The imperative, more proximate reasons for pension reform are also well known - skewed coverage of the existing benefit schemes favouring organized workforce while informal employment is on the rise, worsening financial situation of government pension schemes against a background of rising system expenditure, unfair treatment of private sector workers vis-à-vis public sector employees, an under developed private annuity market, and finally the need to increase the domestic rate of savings through higher contractual savings. In recent years, growing realization about these deficiencies has prompted the government to take reformatory steps to overcome these problems. However, most of these reforms are initiated in a piecemeal manner. The failure of such ad-hoc initiatives suggests that there are no shortcuts to address these problems. The policy makers, therefore, need to take a fresh view and develop new mechanisms to rejuvenate the pension system. A mix of policies like austerity on benefit promises, reliance on greater funding, relaxation of investment norms, encouraging private participation, enhancing system efficiency and developing regulatory capacity could help avert the looming pension crisis and promote better economic security for the aged. The benefit of such a pension regime is also likely to foster aggregate rate of savings and accelerate capital market development.

III. METHODOLOGY

Research is an academic activity and as such the term should be used in a technical sense. The research design refers to the overall strategy that you choose to integrate the different components of the study in a coherent and logical way, thereby, ensuring you will effectively address the research problem.

The task of data collection begins after a research problem has been defined and research design plan chalked out. While deciding about the method of data collection to be used for the study, the researcher should keep in mind two types of data viz., primary and secondary. For this case study multiple choice questionnaire method is used as primary data. The sample area is taken as the state government pensioners in Ernakulam district. Thus the samples are limited to the places in Ernakulam. The sample size should neither be excessively large, nor too small. It should be optimum. In this case study the sample size is 100. Ten Questions are prepared for questionnaire is shown in figure 1.

QUESTIONNAIRE

I Saira Shamsudheen KS, studying first semester M.Tech at Ilahia College of Engineering and Technology, Muvattupuzha currently doing my case study work on "Need for e-Pension Service". The following questionnaire is administered by me as a part of my study requirements.

(signature)

1. Can you say that the pension process is cumbersome and tedious one?
Definitely Definitely not
2. Do you receive your pension at correct time?
Definitely Definitely not
3. Have you experienced a delay in the receipt of Pension Payment Order?
Definitely Definitely not
4. Whether pension is received only after waiting in a long queue in the treasury office?
Definitely Definitely not
5. Whether there is tiresome paperwork involved in order to issue the pension?
Definitely Definitely not
6. Is it difficult to know the pension status of a retiree?
Definitely Definitely not
7. Is it necessary to appear in the office for receiving pension?
Definitely Definitely not
8. Instead of using cheque book, pension amount should be directly transferred to the pensioner's account. Do you think so?
Definitely Definitely not
9. Do you find it difficult that notifications and complaints are dealt directly with the treasury office?
Definitely Definitely not
10. Do you think there is a necessity of pension 'dashboard', integrating internet banking and an estimate of annuity?
Definitely Definitely not

Suggestions:

Figure 1: Questionnaire



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IV. ANALYSIS AND RESULTS

After data collection, the data has to be processed and analysed in accordance with the outline laid down for the purpose at the time of developing the research plan. Data processing includes editing, coding, classification and tabulation of data. Analysis, particularly in case of survey or experimental data, involves estimating the values of unknown parameters of the population and testing of hypotheses for drawing inferences. Analysis of data collected by the questionnaire shows that the respondents were happy to participate in the case study and almost all of them answered all the questions. The survey details are shown in the Table 1 as percentage.

Q. No	Definitely (In %)	Definitely not (In %)
1	70	30
2	66	34
3	68	32
4	70	30
5	44	56
6	67	33
7	84	16
8	71	29
9	54	46
10	68	32

Table 1: Survey details

The table contain a Column Q.No to represent the question number given in questionnaire, figure 1. The percentages are obtained from the survey conducted among the pensioners with the help of the questionnaire shown in figure 1.

Here Chi- square test is used for hypothesis testing. A chi-squared test can be used to attempt rejection of the null hypothesis that the data are independent. The chi- square test is always testing what scientists call the null hypothesis, which states that there is no significant difference between the expected and observed result.

The equation for Chi- square testing is given below:

$$\chi^2 = \sum \frac{(O_{ij} - E_{ij})^2}{E_{ij}} \tag{eq. (1)}$$

Where,

O_{ij} = Observed frequency of the cell in i^{th} row and j^{th} column.

E_{ij} = Expected frequency of the cell in i^{th} row and j^{th} column.

i.e. $E_{ij} = (\text{Corresponding row total} * \text{Corresponding column total}) / \text{Grand total}$ eq. (2)

Here, testing of my hypothesis is going to be conducted.

H_0 : There is no need of e-governance for pension in the treasury department.

H_1 : There is an immediate need of e-governance for pension in the treasury department.

The questions 5 and 8 are used for Chi- square test. Cross tabulation table prepared for Chi- square testing is show in below as Table 2.

Sample	Definitely	Definitely not	Total
Q.No 5	$O_{11}=71$ $E_{11}=57.5$	$O_{12}=29$ $E_{12}=42.5$	100
Q.No 8	$O_{21}=44$ $E_{21}=57.5$	$O_{22}=56$ $E_{22}=42.5$	100
Total	115	85	200

Table 2: Test Data

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Here O_{ij} values can be obtained from the Table 1 and E_{ij} values are calculated with the help of table 2 using the eq. 2. And Chi- square values are calculated from this Table 2 is also given below:

χ^2
3.16956
4.28823
3.16956
4.28823
Total=14.91558

Table 3: χ^2 values

Here degree of freedom = $(2-1)(2-1) = 1$

With degree of freedom, 2 at 5 percentage level of significance, the critical value is 3.841 and calculated value is 14.91. The calculated value, 14.91 is much greater than critical value, so I am rejecting the H_0 hypothesis, it states that there is no need of e-governance for pension in the treasury department. Therefore Accepting the H_1 (alternative hypothesis): There is an immediate need of e-governance for pension in the treasury department.

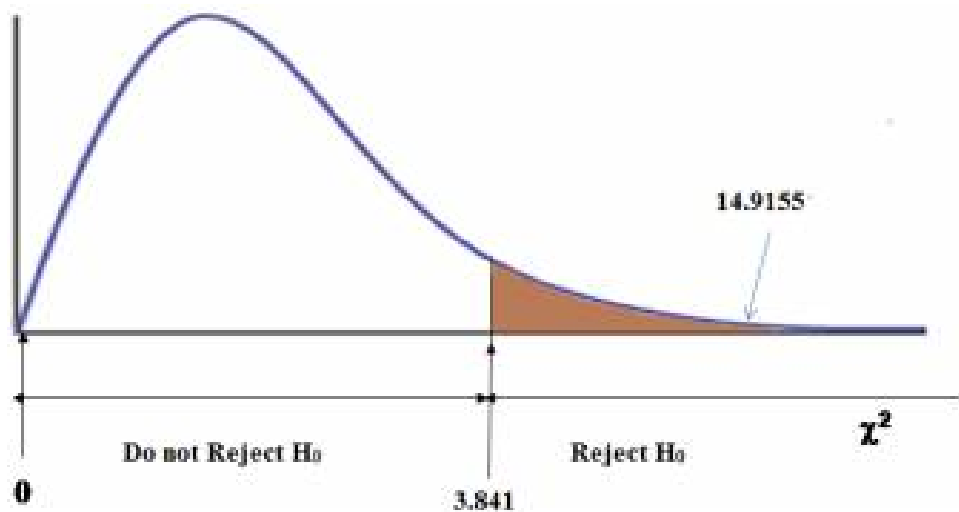


Figure 2: χ^2 test with degree of freedom 2

V. CONCLUSION AND FUTURE WORK

By analysing the case study, I have reached the conclusion that there is an immediate need of e-governance for pension in treasury department. The survey was conducted as I came to know the difficulties faced by a pensioner in receiving his Pension. And it was conducted for all the reachable pensioners in Ernakulam district and it was confined to state government employees.

But during the analysis, it was found that there are very few retirees who are satisfied with the current pension system for their own personal reasons. Still the result obtained was in favour of introducing e-Pension service. The future study can be considered by a wider segment and more sample unit for the data collection. This case study only dealt with pensioners from Ernakulam district. When you are considering a government, almost all districts should be selected for the sample collection. Unfortunately this case study covers only a single district. The data may collect also through the online questionnaire. To increase the sampling area the online questionnaires can be send to the



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pensioners all over Kerala to know about their concepts. And also, e-governance can be implemented as a whole in the treasury department.

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