IMPACT ASSESSMENT OF e-GOVERNANCE:
A CASE STUDY OF SUWIDHA CENTRES IN PUNJAB

Dr. Jyoti[7]

ABSTRACT

In Punjab, e-Governance is being implemented through three ways i.e. core e-Governance projects, front-end delivery channels and department level e-Governance projects. Suwidha centre is a front-end delivery channel, which started in 2003 at Fatehgarh Sahib and is providing various services to citizens under same roof in a time bound manner. In this paper, an attempt has been made to assess the economic, quality of governance and process improvement impact of Suwidha centres on citizens. To meet this objectives, a well-structured questionnaire has been made which have been filled through direct personal interview method from 250 respondents (service users) who were found availing the services from the Suwidha centres during the time of survey from three districts of Punjab namely Hoshiarpur, Patiala and Mansa (selected on the basis of high, medium and low literacy levels in Punjab, respectively). The study concludes that Suwidha centres have increased speed and efficiency in the working process to much extent followed by decrease in time and effort and cost of availing the services. It has also increased transparency in the working procedures. As far as dependence on agents, level of corruption, accountability in the actions of officials, clarity in procedures, convenience of working hours and design of forms while availing the services of Suwidha centres are concerned, there is need of further improvement.

INTRODUCTION

e-Governance is broadly defined 'as an application of information technology to the functioning of the government'. It relies heavily on the effective use of internet and other emerging technologies with an aim to receive and deliver information and services easily, quickly, efficiently and inexpensively. Through these modes 'e-Governance' is trying to create comfortable, transparent and cheap interaction between government and citizens, government, business enterprises, and different levels of governments with cost-effective and high-quality public service delivery (Thapliyal, 2008). In Punjab, e-Governance is being implemented through three ways i.e. core e-Governance projects, front-end delivery channels and department level e-Governance projects (www.dgrpunjab.in). Suwidha centre is a front-end delivery channel, which started in 2003 at Fatehgarh Sahib and is providing various services to citizens under same roof in a time bound manner. The main objectives of Suwidha centres in Punjab are to provide facilitated and quality services by re-organizing government processes, to reduce delay in services delivery by integrating back-end and front-end procedures, to provide on-line status of applications and to standardize the process throughout the state. Services provided by Suwidha centres are issuance of birth/death certificate, attestation of affidavits, issuance and renewal of driving license, registration of vehicle and issuance of nationality certificate etc. www.suwidhaonline.punjab.gov.in

OBJECTIVES OF STUDY

In this paper, an attempt has been made to assess the impact of Suwidha centres on citizens. However, the specific objectives are:

- To analyse the socio-economic profile of the respondents.
- To assess the economic impact of Suwidha centres.
- To assess the quality of governance after the implementation of Suwidha centres.
- To analyse the process improvements in availing the services of Suwidha centres in Punjab.
- To study the overall impact of Suwidha centres in Punjab.
- To study the various types of problems faced by the respondents in availing the services of Suwidha centres in Punjab.

RESEARCH METHODOLOGY

To meet these objectives, both primary as well as secondary data has been used. Secondary data has been collected from the reports, journals and articles related to e-Governance in Punjab. For primary data, a well-structured questionnaire has been made to analyse the perceptions of the respondents about Suwidha centres in Punjab. The questionnaires have been filled through direct personal interview method from 250 respondents (service users) who were found availing the services from the Suwidha centres during the time of survey from three districts of Punjab namely Hoshiarpur, Patiala and Mansa (selected on the basis of high, medium and low literacy levels in Punjab, respectively). Standard statistical tools such as mean values, percentage and five-point

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[7]Assistant Professor, Department of Economics, GGDSD College, Punjab, India, gargj10@gmail.com

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Likert scale have been used while carrying out the tabular analysis. The impact of Suwidha centres on citizens has been assessed through three key attributes as shown in Table 1.

Table-1: List of Factors to Study the Significance of e-Governance

Key Attributes	Factor Code	Details of Factors
Economic	F1	Cost of Services
	F2	Time and Efforts
	F3	Dependence on Agents
Quality of Governance	F4	Level of Corruption
	F5	Accountability
	F6	Transparency
Process Improvements	F7	Clarity in Procedure
	F8	Speed and Efficiency
	F9	Convenience of Working Hours
	F10	Design of Forms

Sources: Authors Compilation

Table-1 shows that there are total 10 factors which have been categorized in three different attributes, i.e., economic, quality of governance and process improvement. Economic attributes comprise of cost of services, time and efforts and dependence on agents; factors showing quality of governance contain level of corruption, accountability in the actions of officials and transparency in the working system. Lastly, the factors, which show process improvements, are clarity in procedures, speed and efficiency, convenience of working hours and design of application forms filled to avail the services after the implementation of Suwidha centres.

RESULTS AND DISCUSSION

Before going for discussion on the perceptions of respondents about Suwidha centres, it is relevant here to have an overview of their socio-economic characteristics. The information about socio-economic characteristics of the respondents of Suwidha centres is contained in Table-2. The table depicts that majority of the respondents, i.e., 66.40 per cent are male as compared to 33.60 percent female respondents. This may be because of the reason that women mostly prefer to do domestic chores while men go outside homes. As far as the age group of the respondents is concerned, maximum number of respondents, (71.20 percent) are found in the age group of 15-45 years. The pattern of the education level of the respondents reveals that the highest proportion of the respondents is graduate followed by respondents having secondary education. When respondents are categorized according to their occupation, then it is found that maximum number of respondents is students followed by the respondents having the occupation of farming. As Sikh community dominates Punjab, so the distribution of the respondents based on their religion shows that more than half of the respondents belong to Sikh community.

Table-2: Social and Economic Profile of Respondents

S. No.	Particulars	Number of Respondents	Percentage
1	**Sex-wise**		
	Male	166	66.40
	Female	84	33.60
	Total	**250**	**100.00**
2	**Age-wise (in Years)**		
	15-30	111	44.40
	30-45	67	26.80
	45-60	48	19.20
	60 & Above	24	9.60
	Total	**250**	**100.00**
3	**Educational Qualification**		
	Illiterate	15	6.00
	Primary	17	6.80
	Middle	23	9.20
	Matric	32	12.80
	Secondary	47	18.80
	Graduate	78	31.20

	Post-graduation	29	11.60	
	Other	9	3.60	
	Total	**250**	**100.00**	
4	**Occupation**			
	Unemployed	28	11.20	
	Government job	25	10.00	
	Private job	38	15.20	
	Self-employed	33	13.20	
	Student	68	27.20	
	Farming	53	21.20	
	Other	5	2.00	
	Total	**250**	**100.00**	
5	**Religion**			
	Hindu	112	44.80	
	Sikh	129	51.60	
	Muslim	9	3.60	
	Total	**250**	**100.00**	

Sources: Field Survey, 2015

The impact assessment of Suwidha centres has been analysed by calculating the mean score of satisfaction level of the respondents regarding the key attributes (Table-1) selected for the study and has been shown in Table-3.

Table-3: Mean Scores of Level of Satisfaction and Ranks of the Selected Factors

Key Attributes	Factor Code	Details of Factors	Mean Score	Rank
Economic	F1	Cost of Services	4.05	2
	F2	Time and Efforts	4.29	1
	F3	Dependence on Agents	3.68	3
Quality of Governance	F4	Level of Corruption	3.45	3
	F5	Accountability	3.63	2
	F6	Transparency	4.00	1
Process Improvements	F7	Clarity in Procedure	3.64	2
	F8	Speed and Efficiency	4.31	1
	F9	Convenience of Working Hours	3.34	4
	F10	Design of Forms	3.65	3

Sources: Field Survey, 2015

Note: Mean Score of satisfaction level is the average of preferences of the respondents regarding the attribute ranging from 1 to 5.

"1" represents 'Much worsened'
"2" represents 'Somewhat worsened'
"3" represents 'No change'
"4" represents 'Somewhat improved'
"5" represents 'Much improved'

As far as economic factors are concerned, the table depicts that the factor 'time and effort (F2)' has scored first rank with the highest mean score of satisfaction level, i.e., 4.29 followed by the factors 'cost of availing services (F1)' and 'need of agents/intermediaries (F3)' having second and third ranks. This shows that Suwidha centres have reduced time and effort in availing the services as compared to the previous traditional or manual system. A study conducted by Singla and Aggarwal (2012) also shows similar results that computerization in public delivery system has reduced time and efforts in availing the services. The cost of availing service through Suwidha centres has also improved as compared to the previous traditional or manual system. However, the satisfaction level regarding the factor, i.e., 'need of agents / intermediaries (F3)' shows that there is not much impact of Suwidha centres in reducing the need of intermediaries while availing the services.

'Transparency' from the factors showing quality of governance has got first rank which shows that as compared to traditional system, the respondents perceive the Suwidha centres have increased transparency in the governance. On the other hand, the respondents ranked 'accountability' (3.63) at the next. While, the lowest rank of 'corruption' (3.45) reveals that this menace still prevails in the system so the respondents are relatively less satisfied. This finding of the study matches with other finding (Singla

and Aggarwal, 2011) which shows that the average score of transparency comes to be high, i.e., 4.28 but accountability and level of corruption need more betterment.

When a comparison is made between the Suwidha centres and traditional system regarding the factors of process improvement then Table-4 depicts that the Suwidha centres have increased 'speed and efficiency' (4.31) in the working system while other factors like 'clarity in the procedures' (3.64), 'design of forms' (3.65) and 'convenience of working hours' (3.34) need further improvement.

To adjudge the relative performance of key attributes or simply we can say to find out the main benefits of Suwidha centres to the citizens, the overall ranking of the mean scores of satisfaction level of all the factors of Suwidha centres belonging to economic, quality of governance and process improvement attributes has been made which has been shown in Table 4.

Table-4: Overall Ranking Of the Factors of G2C Category Project Suwidha Centres

Factor Code	Details of Factors	Mean Score	Rank
F1	Cost of service	4.05	3
F2	Time and effort	4.29	2
F3	Dependence on agents	3.68	5
F4	Level of corruption	3.45	9
F5	Accountability	3.63	8
F6	Transparency	4.00	4
F7	Clarity in procedure	3.64	7
F8	Speed and efficiency	4.31	1
F9	Convenience of working hours	3.34	10
F10	Design of forms	3.65	6

Sources: Field Survey, 2015

Note: Mean Score of satisfaction level is the average of the preferences of the respondents regarding the attribute ranging from 1 to 5.

"1" represents 'Much worsened'
"2" represents 'Somewhat worsened'
"3" represents 'No change'
"4" represents 'Somewhat improved'
"5" represents 'Much improved'

Table-4 shows that there are four factors, i.e. Speed and efficiency; time and effort; cost of availing services; and level of transparency, which have mean, scores more than 4. This shows that Suwidha centres have increased speed and efficiency in the working process to much extent followed by decrease in time and effort and cost of availing the services. It has also increased transparency in the working procedures. As other factors like dependence on agents, level of corruption, accountability in the actions of officials, clarity in procedures, convenience of working hours; and design of forms are concerned, all carry mean scores of satisfaction level less than 4 which show that Suwidha centres have not decreased the dependence of agents and level of corruption to much extent. As far as clarity in procedures and accountability in the actions of officials are concerned, the respondents seem less satisfied. Therefore, there should be further improvement in the working procedure of Suwidha centres in Punjab.

Problems Faced by Respondents

Suwidha is a front-end delivery channel and the services provided by Suwidha centres are issuance of birth / death certificate, attestation of affidavits, issuance and renewal of driving license, registration of vehicle and issuance of nationality certificate etc. The problems faced by the respondents of Suwidha centres are shown in Table-5.

Table-5: List of Problems Faced by Respondents of Selected G2C Category Project Suwidha

S. No.	Problems	Problems Faced by Respondents (in Percentage)
1.	Lack of Understanding due to Illiteracy and Lower Level of Education	64.11
2.	Need of Agents in Getting Services	34.87
3.	Non-Satisfactory Behaviour of the Functionaries	49.73
4.	Inconvenient Working Hours	35.57
5.	Rural-urban Disparities in Accessibility of Services	48.33

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6.	Long Waiting Time for Availing the Services	61.11
7.	Multiple Windows for Availing Single Service	32.88
8.	Networking Problem	45.27
9.	Shortage of Staff	70.03
10.	Lack of Clarity regarding the Working Procedures	42.59

Sources: Field Survey 2015

The detailed analysis of these problems is as follows:

1) Lack of Understanding due to Illiteracy and Low Literacy

The field survey shows that lack of understanding because of low literacy level is one of the major challenges in getting the services from Suwidha centres in Punjab. Though literacy rate has an upward trend in Punjab from 69.70 per cent to 75.84 per cent during the period of 2001 to 2011 but the Table-5 depicts that nearly two-thirds of the total respondents (64.11 per cent) have reported that because of illiteracy, lower level of education and computer illiteracy they are not able to understand the procedures to get the work done at the Suwidha centres. So, low literacy, lower level of education and computer illiteracy among the citizens of Punjab are the main hurdles, which restricts the equal benefits of the Suwidha centres to the people of Punjab.

2) Need of Agents in Getting Services

Even after a decade of the establishment of Suwidha centres, it is noticed that nearly one-third of the respondents (34.87 per cent) still need the help from intermediaries for availing the services of Suwidha centres. Moreover, it is further noticed that female, old and illiterate respondents have more need of intermediaries as their other counterparts.

3) Non Satisfactory Behaviour of the Functionaries

Behavior of functionaries of Suwidha centres is also one of the problems faced by the citizens in getting services from it. Nearly half of the respondents (49.73 per cent) are on the view that behavior of officials is not satisfactory for them.

4) Inconvenient Working Hours

However, the timing of getting services from the Suwidha centres is 9.00 A.M. to 5.00 P.M., but the field survey shows that nearly one-third respondents (35.57 per cent) do not find time schedule convenient to them. This is because of the reason that the people who have job duration of 9.00 AM to 5.00 PM find it very difficult to manage time to go to the Suwidha centres for their works. Therefore, people want the Suwidha centres to remain open on Saturdays and Sundays also so that they can avail the services of Suwidha centres without taking leaves from their jobs. Moreover, there should be odd hours/shifts of working after 5.00 P.M.

5) Rural-urban Disparities in Accessibility of Services

The concept of e-Governance aims at increasing efficiency and effectiveness of the government, but these goals can be achieved only if the services provided by e-Governance would be available to all of the citizens equally. The table-5 shows that 48.33 per cent respondents do not agree on the view that services of Suwidha centres are equally accessible to people of both rural and urban areas. The main reason behind this is that Suwidha centres are mainly located in the cities and rural people have to cover a long distance to come to the cities for availing the services of Suwidha centres.

6) Long Waiting Time for Availing the Services

The process of delivering services to the public in the government offices has always been slow and there has been unreasonable delay even in the routine matters. Therefore, the Suwidha centres were opened with an aim of delivering quick services to the citizens under the same roof. However, the table-5 shows that 61.11 per cent of the total respondents are on the view that the waiting time for availing the services at Suwidha centres in Punjab is still high due to long queues.

7) Multiple Windows for Availing Single Service

Though Suwidha centres are providing different types of services to citizens under one roof, but nearly one-third of the total respondents (32.88 per cent) feel that there are so many windows which they have to visits for getting single service done, i.e., if a citizen has to apply for driving license, he has to visit multiple windows for various types of activities related to get the service done, i.e., for submission of form, for medical test, for photo etc. This whole process makes the completion of work very tough.

8) Networking Problem

The internet connectivity at the Suwidha centres is not smooth as servers remain down more often so the citizens have to wait for the long time. The field survey shows that 45.27 per cent respondents are complaining that there is problem of internet connectivity at the Suwidha centres in Punjab.

9) Shortage of Staff

The shortage of staff at the Suwidha centres is the main challenge for the citizens who avail the services from it. Due to the shortage of staff, the citizens have to wait for many hours and have to stay in long queues. Moreover, if the concerned employee of the Suwidha centre regarding the particular service is on leave, then the citizens have to make multiple visits at the Suwidha centres. Table-5 reveals that 70.03 per cent respondents face many problems because of shortage of staff.

10) Lack Clarity regarding the Working Procedures

Suwidha centres are opened by Punjab government for the convenience of people and for the quick delivery of services. However, it is noticed during the field survey that the citizens are not much aware regarding the working procedures of availing services at Suwidha centres in Punjab. They have hesitations while availing services from Suwidha centres. Table-5 shows that 42.59 per cent of total respondents have not much clarity about the working procedures of Suwidha centres in Punjab.

CONCLUSIONS

Suwidha centre is a front-end delivery channel that is providing various services to the citizens under same roof in a time bound manner. Based on the findings of this study, it can be concluded that the students and the farmers are more users of Suwidha centres as they visit more for availing various services provided under it.

The study shows that e-Governance has reduced time and effort and cost of availing services in general but specifically illiterate and people of higher age do not feel so. As far as the comparison between Suwidha centres and previous system regarding the dependence on agents is concerned, it is still intact and again there is more need of agents for illiterate and people with higher age.

The assessment of quality of governance factors shows that as compared to previous manual system, Suwidha centres have increased transparency in the governance but the level of satisfaction of the people has remained low on the issue regarding the reduction in level of corruption and for increasing accountability in the actions of officials. Variations in the level of satisfaction are found among the perceptions of the respondents in various categories.

The factors of process improvement highlight that Suwidha centres have increased speed and efficiency in the working system while other factors like clarity in procedures, design of forms and convenience of working hours need further improvement. The respondents who are literate, younger and doing jobs whether private or government have shown their higher level of satisfaction on the other hand, the respondents who are illiterate, higher aged and having the occupation of farming are less satisfied over the issue that Suwidha centres have increased clarity, speed and efficiency in getting services done.

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