# Green Army Wadakkanchery Block Labour Bank: A Servqual Analysis

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### **ABSTRACT**

The United Nations defines food security as "all people at all times having both physical and economic access to the basic food they need". Kerala has unique agro ecological, socio economic and political features. Traditionally, Kerala has been an agricultural state. The state had 8.74 lakh ha under the paddy crop in 1970-71; this declined to 2.34 lakh ha in 2009-10 a drop of 73.23 per cent. Green Army Wadakkanchery Block Labour Bank (GAWBLB) is an institutional intervention came with an aim to rejuvenate paddy sector in the Wadakkanchery block of Thrissur district, Kerala and contributing to food security in the state. It provides agro machinery services such as preparation of mat nursery, transplantation and harvesting to the farmers in paddy cultivation. The study dealt with an objective to assess the service quality of GAWBLB. Primary and secondary data were used for the analysis. 30 members of GAWBLB and 60 farmers who availed services from the case firm were approached with well structured pre tested interview schedule. 10 dimensions of service quality were analyzed using the SERVOUAL model. The Service quality Gap was obtained by the difference in their expectation and perception of the services availed. The Likert scale with 7 points continuum was used in the study for obtaining the perception level of the farmers. Majority of the farmers were satisfied with services of GAWBLB. However, few gaps have been identified in services quality dimensions. The highest gap was found in responsiveness dimension. The productivity of paddy cultivation in the study area had been increased (2.5 to 4.5 tonnes per hectare) after availing the service GAWBLB. They were in the opinion that the case firm was always not able to reach their field at proper time and suggested that inclusion of additional trained manpower would caters the need. Some of the suggestions made on the light of findings to improve the service quality were that case firm could try diversification of agro services with all under one roof concept, transparent and implementable season wise participatory calendar for agricultural activities in the service area and a mobile service breakdown unit with the joint partnership of manufacturers of agro machinery to ensure timely undisrupted services in the field.

**Key words:** Service quality, Green Army, Reliability, Responsiveness, Competency, Security, Accessibility, Courtesy, Credibility, Communication, Understanding and Tangibility

Food and nutritional security are the foundations of a decent life, a sound education and indeed, the achievement of all the Millennium Development Goals. The FAO reported that, 1.02 billion people are suffering from chronic hunger, mostly in Africa and South Asia. Despite, Kerala having tropical monsoon climate and abundant water sources, yet it depends heavily on other states to feed its population and able to meet only 15.00 per cent of its requirement of paddy from own production. There was drop of 73.23 per cent in area under cultivation of paddy noticed (8.74 to 2.34 lakh ha) lead to fallowing of paddy fields and conversion to non agricultural purpose caused serious threat to its food security. Nevertheless the efforts on the importance given to food security programme, by both Central and State Government, the available traditional farmers in agriculture are forced to abandon paddy cultivation, due to non availability of timely labour. The younger generation in Kerala and even the unemployed women are also less attracted in agricultural related works. Meanwhile, many high yielding varieties have been bred and modern machineries developed for mechanization of paddy cultivation attempted through group farming approach. But the goal could not be achieved as the very basic problem remained unaddressed and become recurrent one.

An intervention model of Kerala Agricultural

University "Food Security Army" for food security trained the Green Army members of Wadakkanchery block Panchayat of Thrissur district of Kerala in mechanized farming through people participation and thus rejuvenating the paddy production and contributing to the food security.

The block Panchayat formed the labour bank under GALASA (Group Approach for Locally-Adapted and Sustainable Agriculture) a few years ago and now with 400 strong Green Army members, had contributed for the increase in area of cultivation 3,000 to 4,559 hectares in the last two years (2009-2011). The demand driven services, such as preparation of mat nursery, transplantation and harvest are delivered to the farmers, based on the request. Despite, Green Army sometimes happened to be failed to deliver service at exact time as promised. This kind of lag in service led to slowdown the growth and performance of GAWBLB. Since, it has began the services only very recent past, it is felt essential to study the service quality of the organization in order to suggest strategies to function effectively and sustainably. Keeping this as a background, the study was conducted with an objective to assess the service quality of Green Army Wadakkanchery Block Labour Bank (GAWBLB) in mechanization of rice cultivation.

#### **METHODOLODY**

The study was conducted in the Wadakkanchery Block panchayath of Thrissur district in Kerala. The Primary data were collected with the help of pre tested interview schedule and focused group discussion. The sample size consisted of 60 farmers who availed service from Green Army for carrying out agricultural activities and 30 labourers of GAWBLB, selected though simple random sampling method, equally distributed to six panchayats. SERVQUAL scale suggested by Parasuraman et al (1988) was adopted with suitable modification with respect to agricultural activities and nature of services offered by GAWBLB. Ten dimensions viz., Reliability, Responsiveness, Competency, Security, Accessibility, Courtesy, Credibility, Communication, Understanding and Tangibility were well considered for the study. Each dimension is measured by analyzing its supportive attributes. Gap scores were found for each attribute by taking the response of the farmers and finding the difference between perceived score and expected score. Paired t test was used for the analysis of the data. The negative score thus derived indicates that there is a gap between the expectation and the perception of the farmers. If the negative values occur in the attributes, the organization can adopt appropriate strategy to overcome the gap and thus delivering a better service.

## RESULTS AND DISCUSSION

This Service quality analysis of GAWBLB was carried out with respect to the 10 dimensions as stated above are discussed and presented below.

### Reliability

The operational definition of reliability is inclusive of the attributes on paddy cultivation related services at promised time, solving farmers' field problems, confidence on delivery of service and keeping and maintaining records and registers genuinely. The Table 1 clears that, to what extend the GAWBLB was reliable to the farmers on providing the agricultural mechanization services. The greatest service gap was found in the attribute (R1) 'Consistent response within promised time frames' which was measured at -2.07 and the very next attribute (R2) 'Sincerity and interest in solving problems as they occur, measured at -1.87. Third Gap was found in the attribute (R3) 'Show confidence on delivering the service, which was recorded at -1.72. The mean score gap obtained for the all the attributes (R1, R2, R3 and R4) were significant at 5 percent level. The result obtained confirmed that the existence of significant service gap in all the stated attributes of reliability dimension.

GAWBLB was not able to respond within the promised timeframe to all the farmers as they could not meet demand and supply of labour as aroused during the season. The existing available 67 transplanter

Table 1
Gaps between perceptions and expectations
(MP-ME) of reliability dimensions (N=60)

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SI No.	Attributes	ME	MP	MG MP-ME	T VALUE (2 tail)		
R1	Consistent response within promised timeframes	7	4.9 3	-2.07 (0.8995)	17.798		
R2	Sincerity and interest in solving problems as they occur	7	5.1	-1.87 (0.7241)	19.969		
R3	Show confidence on delivering the service	7	5.2 8	-1.72 (0.7612)	17.469		
R4	Keeping and maintaining records genuinely	7	6.0 7	-0.93 (0.6342)	11.399		

All the attributes indicate significance at 5 percent level, t value: 2.000 ME: Mean score of Expectation' MP: Mean score of Perception, MG: Mean Gap (Value in bracket represents the Standard Deviation of Mean Gap)

machines and 3 harvesters with 207 trained members may not be adequate to cover the entire area of paddy cultivation at a single point of time. This makes a serious problem to the farmers, because as a seasonal crop, there is a great compulsion to complete the work within a short span of time. Green army was not able to bestow sincere interest in solving problems because of limited labour forces and unforeseen poor working condition of machinery at times. Due to this, they have some sort of lack of confidence on delivering the service. During the focus discussion, it was also noted that in some cases they could not maintain proper records of work allotment schedule because of their ignorance.

#### Responsiveness

Responsiveness can be related with dimension inclusive of attributes like informing the customers about the delivery of service, readily respond to customers request and never too busy to respond the customers' request. The results obtained were presented in Table.2 for discussion. The highest service gap score was seen in the attribute R3 'never too busy to respond farmers' request, which was measured at -2.68. This gap was found to be negative and statistically significant at 5% level. The next greatest gap (-2.67) existed in R1 'inform customers when service will be performed'. The mean gap existed in the attribute R2 'Readily respond to customers' request was -2.0.

Green army, during the initial stage of their service, was able to reach the farmers on exact time as they requested. But now, the demand for the use of farm mechanization services had increased and hence they were not able to respond to the farmers' request without much delay as the work force available seems to be insufficient. Paddy cultivation is highly depending on climatic conditions and thus timely response is very much important to exhibit the good quality service.

Table 2
Gaps between perceptions and expectations (MP-ME)
of responsiveness (N=60)

	or responsiveness				
SI No.	Attributes	ME	MP	MG MP-ME	T VALUE (2 tail)
R1	Inform customers when services will be performed	7	4.33	-2.67 (1.1741)	17.593
R2	Readily respond to customers' request	7	5.00	-2.00 (1.4844)	10.437
R3	Never too busy to respond to farmers request	7	4.32	-2.68 (1.1273)	18.437

All the attributes indicate significance at 5 percent level, t value: 2.000 ME: Mean score of Expectation' MP: Mean score of Perception, MG: Mean Gap (Value in bracket represents the Standard Deviation of Mean Gap)

## Competency

The third dimension of the service quality deals with the competency of the Green Army. Competency can be assessed by analyzing the sufficient expertise of service provider, problem solving skills and capital resource management. The Table 3 describes the gap occurred in the dimension 'competency'. The greatest gap marked was -1.07 for the attribute (C3) 'Having enough capital resource and infrastructure management skill'. The attribute (C1) 'Having sufficient expertise in the area of the services'

Table 3 Gaps between perceptions and expectations (MP-ME) of competency  $_{(N=60)}$ 

	(ivil ivilly of competency						
Sl. No	Attributes	ME	MP	MG MP-ME	T VALU E (2 tail)		
C1	Having sufficie nt expertise in the area of the services	6.8 7	5.8 7	-1.00 (0.7811)	9.916		
C2	Having good problem -solving skills	6.9	6.2	-0.70 (0.6189)	8.761		
СЗ	Having enough capital resource and infrastructure management skill to provide service	6.9	5.8 5	-1.07 (0.9181)	8.999		

All the attributes indicate significance at 5 percent level, t value: 2.000 ME: Mean score of Expectation' MP: Mean score of Perception, MG: Mean Gap (Value in bracket represents the Standard Deviation of Mean Gap)

#### had the second greatest gap (-1.0)

Farmers were in the opinion that, the infrastructure and human resources of GAWBLB was not adequate enough to serve the farmers on intended time and make them satisfied. However, farmers opined that Green Army has the ability of problem solving. Due to the insufficient labour force, they fail to reach the farmers on accurate time and to deliver the service. This particular deficiency shoulders the responsibility of not exercising the competency dimension in satisfactory level. Although, GAWBLB has got well trained technical manpower around 407, only half of them were actually involved in providing

farm mechanization service. The currently available trained manpower has not match with the demand of farm mechanization service during the season. Hence, it couldn't give ample opportunity to exhibit the competency in full ledged level, resulted for a small service gap. Despite, a small service gap, it has to be addressed genuinely, to improve the service quality, because the farm mechanization is mostly depending on the technical aspects of the service.

## Security

Security means, here the farmers have to feel increased faith/belief in the services of Green Army. The security related dimensions of service quality and its attributes were presented in Table 4 for the discussion. Table 4 shows that, in the dimension 'Security', the attribute (S1) 'Should be able to believe Green Army' had the wider gap than any other attributes. The gap in S1 existed at the level of 1.88 and the next gap is at -1.07, which was found in the attribute (S2) 'Safe negotiation with Green Army'.

In many occasions GAWBLB had failed to reach the customers on prescribed time schedule. On discussion with the farmers and the office bearers, it was noted that certain circumstances forced the GAWBLB's failure, to provide farm mechanization service as per the desired time schedule. The negotiation mechanism was not practiced between farmers and GAWBLB regarding time schedule on rendering the services. As per their bye-law, the rate fixed for the service is pre determined and the farmers cannot negotiate on it. All such deficiencies hold the responsibility of creating service gap in the aspect.

Table 4
Gaps between perceptions and expectations
(MP-ME) of security (N=60)

Sl. No	Attributes	ME	MP	MG	T VALUE (2 tail)
	Should be able to believe Green		5.1	-1.88	
S1	Army extended services	7	2	(0.9930)	14.690
	Safe negotiation with Green		5.9	-1.07	
S2	Army on pricing of the services	7	3	(0.6856)	12.051
	Green Army gets adequate		6.3	-0.67	
S3	support from the institutions	7	3	(0.6013)	8.588

All the attributes indicate significance at 5 percent level, t value: 2.000 ME: Mean score of Expectation' MP: Mean score of Perception, MG: Mean Gap (Value in bracket represents the Standard Deviation of Mean Gap)

#### Accessibility

The operational definition of accessibility deals with availability of technical resources that could ease the spread of information, availability of the service provider at all times to assist farmers and how quickly the customers can contact the service provider to access the services. The Table 5 depicts that, the service gap between expectation and perception of the farmers for the dimension of accessibility. The highest service gap was found in (A2) 'Being available at all

Table 5
Gaps between perceptions and expectations
(MP-ME) of accessibility (N=60)

Sl. No	Attributes	ME	MP	MG MP-ME	T VALUE (2 tail)
A1	Having technical resources that ease the spread of information	7	5.2	-1.80 (0.9351)	14.909
A2	Being available at all times to assist farmers	7	4.3	-2.70 (1.6188)	12.920
A3	Farmers can able to contact without any delay	7	6.2 5	-0.75 (0.6001)	9.680

All the attributes indicate significance at 5 percent level, t value: 2.000 ME: Mean score of Expectation' MP: Mean score of Perception, MG: Mean Gap (Value in bracket represents the Standard Deviation of Mean Gap)

times to assist farmers' which were recorded at -2.70. The next highest gap was seen in (A1) 'Having technical resources that ease the spread of information' and measured at -1.80.

Farmers needs all those service required for Paddy cultivation. But, GAWBLB provides transplantation as the prime service, and thus, it unable to provide those all services at present. Harvesting service was provided only to a very few farmers and they were also not availing the services all time. Hence to comprehend that, the service gap was relatively lower for already existing services like transplanting service. The accessibility dimension was wider for unavailable services of the GAWBLB. Farmers were found "difficult to access such services from the sources". This dimension could be strengthen by introducing other warranted services like full fledged harvesting service, market support, plant protection, input supply in the pipe line.

#### Courtesy

Courtesy of service provider accounts on the personal attention that paid to the farmers and understanding the specific needs of the farmers and working to satisfy the needs. Table 6 revealed that gap has occurred in the dimension courtesy. The greatest gap was found in C1 'Green Army gives personal attention to the farmers' (-1.95). The second greatest gap was found in C3 'Understand the specific needs of the farmers' which was measured at -1.78 and C2 'Having your best interests at heart' has a gap of -1.21

Table 6
Gaps between perceptions and expectations
(MP-ME) of courtesy (N=60)

Sl. No	Attributes	ME	MP	MG MP-ME	T VALUE (2 tail)
C1	Green Army gives personal attention to the farmers	7	5.05	-1.95 (0.7461)	20.243
C2	Having your best interests at heart.	7	5.78	-1.21 (0.6912)	13.636
СЗ	Understand the specific needs of the farmers	7	5.21	-1.78 (0.8847)	15.613

All the attributes indicate significance at 5 percent level, t value: 2.000 ME: Mean score of Expectation' MP: Mean score of Perception, MG: Mean Gap (Value in bracket represents the Standard Deviation of Mean Gap)

According to the farmers, GAWBLB was unable to give personal attention to each of them. It just delivered the service as they had promised and did not give any other personal attention to the farmers to improve the productivity of the farmers. Of course the immediate goal of GAWBLB was to enhance the paddy cultivation though farm mechanism, other related services were assumed only of secondary importance. But farmer's expectations were that, it would also encourage for providing other services on secondary agriculture too. By providing such services in the near future, the courtesy dimension could be improved.

## Credibility

Credibility means the goodness of the reputation that the Green Army has established among farmers, being highly believable and honest as well as the degree of publicity activities involving customers. Table 7 shows that there was no much gap in the attribute of credibility. The greatest gap was measured for the attribute C2 'Having a good reputation in the market' (-0.73) and C1 'Being believable and honest' (-0.58).

Table 7
Gaps between perceptions and expectations
(MP-ME) of credibility
(N=60)

Sl. No	Attributes	ME	MP	MG ME-MP	T VALUE (2 tail)
C1	Being believable and honest	7	6.42	-0.58 (0.5612)	8.051
C2	Having a good reputation in the market	7	6.27	-0.73 (0.5783)	9.822
С3	The degree of hard sell involves interactions with the customer	7	6.67	-0.33 (0.5098)	5.065

All the attributes indicate significance at 5 percent level, t value: 2.000 ME: Mean score of Expectation' MP: Mean score of Perception, MG: Mean Gap (Value in bracket represents the Standard Deviation of Mean Gap)

All the farmers agreed that, their productivity has been increased after availing the service of Green Army and thus it has got good reputation. The main supporting reasons for the existence of such smaller service gap, that they had well trained manpower in agriculture machinery operations. GAWBLB has trained by very reputed FSA wing of KAU, resulted for increased credibility. However, shortage in technical manpower, lack of infrastructure etc, were sometime not fostering the credibility dimension of service quality.

## Communication

Communication is operationalized as the ability of the Green Army to establish a working rapport with customers and effectively demonstrates the services offered and their associated cost and giving assurance in addressing customer's problems. The greatest gap was found in the attribute C2 'Assurance that a problem will be handled effectively and efficiently' (-2.75) shown in Table.8. The next gap was found in (C1) 'Explanation of the service itself

including associated costs' which measured at -2.52 and the next gap was in the attribute C3 'Maintain good rapport'(-1.87).

Table 8
Gaps between perceptions and expectations
(MP-ME) of communication (N=60)

Sl. No	Attributes	ME	MP	MG ME-MP	T VALUE (2 tail)
C1	Explanation of the service itself including associated costs	7	4.48	-2.52 (0.6241)	31.234
C2	Assurance that a problem will be handled effectively and efficiently	7	4.25	-2.75 (0.7946)	26.808
СЗ	Maintain good rapport	7	5.13	-1.87 (0.6235)	23.192

All the attributes indicate significance at 5 percent level, t value: 2.000 ME: Mean score of Expectation' MP: Mean score of Perception, MG: Mean Gap (Value in bracket represents the Standard Deviation of Mean Gap)

It provides only transplantation service, whereas the farmers would like to get additional services from the service providers. Sometimes it fails to inform the customers about the exact time in which the service would be provided. Many a times it also fails to reach the customer point on pre-determined time. This was happened mainly because of poor communication channel, between the source and farmers. Any lag in communication, seriously affect the farmer's routine farm operations, forces the farmer preparing for contingency measures.

#### Understanding

It refers to the service provider's effort to learn and understand specific customer needs. The Table 9 depicts the gap that the farmers perceived in availing the service. The greatest was found in the attribute 'Learning the customer's specific requirements' and measured at -2.08 and the next gap for the attribute 'Provision of individualized attention by service provider' with mean gap score of -2.08.

Understanding is very important element for enhancing the service quality. The depth in understanding the farmer's problem in paddy mechanization would help the service provider to perform better. Lack of understanding, invariably resulted in service gap. In the case of GAWBLB, it was

Table 9
Gaps between perceptions and expectations
(MP-ME) of understanding (N=60)

Sl. No	Attributes	ME	MP	MG ME-MP	T VALUE (2 tail)
U1	Learning the custome r's specific requirements	7	4.92	-2.08 (0.8496)	18.995
U2	Provision of individualized attention by service provider	7	5.52	-1.48 (0.9112)	12.610

All the attributes indicate significance at 5 percent level, t value: 2.000 ME: Mean score of Expectation' MP: Mean score of Perception, MG: Mean Gap (Value in bracket represents the Standard Deviation of Mean Gap)

reported that it has not took adequate efforts to learn the customer/farmer specific problem. It has developed the good track for performing transplantation service at present and paid less attention for the other services. This paved way for poor understanding farmer's specific issues related to farm mechanization results in wider service gap.

## **Tangibility**

Tangibility refers to that what customers can visually observe. As such tangibility is operationalized as the presence of sufficient physical space for the storage of inputs at the service provider's venture premises and attractiveness of the venture as well as the observable improved farm productivity and efficiency and effectiveness of input availed by the farmers. Table 10 revealed the gap that occurred in the delivery of the service at farmer point by GAWBLB. The greatest gap was found in the attribute T3 'Require additional labour for completing the work' measured at -2.02. The attribute T4 'The machines are efficient' show a gap of -1.72 and the next attribute T1 'Having enough space for storage of inputs' has a gap of -1.37. Most of the agricultural operations have embedded with tangibility elements. The farm operation, especially transplanting has more proned to tangibility dimension. The use of transplanters and its effectiveness will be noticed within a short time by the users.

Table 10
Gaps between perceptions and expectations
(MP-ME) of tangibility (N=60)

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SI. No	Attributes	ME	MP	MG ME-MP	T VALUE (2 tail)		
T1	Having enough space for storage of inputs	7	5.63	-1.37 (0.6369)	16.621		
T2	Improve the productivity	7	5.98	-1.02 (0.1291)	61.000		
T3	Require additional labour for completing the work	7	4.98	-2.02 (0.9296)	16.804		
T4	The machines are efficient	7	5.28	-1.72 (1.1657)	11.406		

All the attributes indicate significance at 5 percent level, t value: 2.000 ME: Mean score of Expectation' MP: Mean score of Perception, MG: Mean Gap (Value in bracket represents the Standard Deviation of Mean Gap)

Farmers had opined that they might require additional labourers to complete the transplantation of the seedlings even after working with transplanters. The spaces left during the process of machine transplanting, may require additional labourers to fill the gap. Considering the nature of break down and it got repaired by labourers themselves or with the help of trained technician from garage. Thereby farmers had lost some critical working hours. This kind of particular setback uncovers the tangibility of the service dimension.

## Servqual: Comprehensive Analysis of Green Army Wadakkanchery Block Labour Bank

Comprehensive analysis was done to find out the

greatest mean score gap among the dimensions of service quality of Green Army Wadakkanchery Block Labour Bank, Thrissur. The ten dimensions of service quality are presented with their respective mean gap and 't' value in the Table 11. The comprehensive analysis gives a vivid picture of the service quality dimensions. The mean gap score obtained for the service quality dimensions are given in the order responsiveness (-2.45), communication (-2.38), understanding (-1.78), accessibility (-1.75), reliability (-1.65), courtesy (-1.65), tangibility (-1.53), security (-1.21), competency (-0.92), credibility (-0.55). The composite mean gap score worked was -1.59.

The highest gap existed in the dimension of responsiveness (-2.45) which is more as compared to composite mean gap (-1.59). Because responsiveness is very important element for success of any organization, which could helps in strengthening customer relation. Hence, GAWBLB could try to exhibit/show responsiveness, while delivering the services to the farmers. The second largest gap was found in the dimension of communication (-2.38.) Green Army should be able to forecast the exact time of delivery of services and should deliver it on the prescribed time schedule without any delay. A clear cut communication strategy could be evolved to receive, as well as to send to the farmers regarding service. The extent to which increase in understanding of the farmers problem/issues, helps to deliver good quality service and could reduce the service gap (-1.78) Therefore, GAWBLB has to bestow some more attention to build the understanding of farmer by developing 'Know your customer' database. GAWBLB has not tried other services requested by the farmers. This creates gap in accessibility dimension (-1.75)

The agriculture is highly depending on climatic conditions, the service has to be delivered on accurate time. The lack of sufficient human resource to reach a widespread area in the Block Panchayath had created a gap in the reliability (.-1.65). If Green Army was able to provide a personal attention to the farmers. it could be more beneficial to the farmers and thus the gap in courtesy dimension (-1.65) can be reduced. Personal attention could help to understand the specific need of farmers and respective services can be delivered. GAWBLB should involve a system to record the issue as well as the follow-up. The farmers depended local labourers to fill the gap filling of seedlings, which aroused out in the process of machine transplanting. The unexpected breakdown of the

machinery also created a time lag in the service contributes gap in tangibility dimension(-1.53) As, Green Army sometimes fails to deliver the service on the exact time schedule, it create a kind of insecurity among the farmers, and raised doubt, whether they could get service or not? This insecurity feeling created a service gap in the dimension (-1.21). The dimension of competency had a gap of - 0.92 in the service of Green Army. The farmers opined that, the reason for the delay in delivery of service was mainly due to insufficient labourers, lack of services on proper time, affected the reputation of the Green Army which makes the gap in the credibility of the organization. Although the gap found was very little on comparing with composite mean gap, it has its own significance in accomplishes the credibility dimension. All the ten dimensions reflected the service gap with negative mean score, and tested at 5% significant level. This gives strong implications that all the dimensions are to be addressed with at most care to improve the service quality of GAWBLB.

Implications and recommendations

Based on the light of study the prescriptive suggestions are given for scaling up of this GAWBLB concept for ensuring food security in the state.

- Season wise participatory calendar for agricultural activities should be made transparent and operational in the real sense taking in to consider ation of contingency.
- A mobile service breakdown unit can be developed with the joint partnership with manufacturers of agro machinery to ensure timely undisrupted services in the field by establishing the garage facility with good inventory of spare parts and consumable.
- A good proportion of indigenous machinery may be inducted for service, rather than complete dependency of foreign machinery.
- Existing Project may have visionary approach to include of area specific, crop specific, time specific agro services in the service list to engage all the trained members of the labour bank for productive output. Green Army Labour Bank Hub (GALBH) can be established, in case if it is replicated in different districts of Kerala.
- Hi-tech friendly, user friendly and gender friendly improved agricultural tools and equipments may be inducted for these services with appropriate training and skill development programme.

Table 11
Servqual: Comprehensive analysis of green army Wadakkanchery Block Labour Bank

Sl	Dimensions	EM	PM	MG	T
No:					Value
1	Reliability	7 (0.0)	5.35 (0.4994)	-1.65 (0.4994)	6.598
2	Responsiveness	7 (0.0)	4.55 (0.3897)	<b>-2.45</b> (0.3897)	10.888
3	Competency	6.90 (0.0306)	5.98 (0.2139)	-0.92 (0.1929)	8.262
4	Security	7 (0.0)	5.79 (0.6165)	-1.21 (0.6165)	3.390
5	Accessibility	7 (0.0)	5.25 (0.9760)	<b>-1.75</b> (0.9760)	3.106
6	Courtesy	7(0.0)	5.35 (0.3837)	-1.65 (0.3837)	7.463
7	Credibility	7(0.0)	6.45 (0.2021)	-0.55 (0.2021)	4.686
8	Communication	7 (0.0)	4.62 (0.4564)	<b>-2.38</b> (0.4564)	9.032
9	Understanding	7(0.0)	5.22 (0.4243)	<b>-1.78</b> (0.4243)	5.933
10	Tangibility	7(0.0)	5.47 (0.4328)	-1.53 (0.4328)	7.082
	Mean Total	6.99 (0.0316)	5.40 (0.5761)	<b>-1.59</b> (0.5879)	8.536
	Composite				

All the attributes indicate significance at 5 percent levels (t value: 2.262) EM=Mean score of Expectation; PM = Mean score of Perception; MG= Mean Gap score; (Value in bracket represents the Standard Deviation)

#### CONCLUSION

Green Army Wadakkanchery Block Labour Bank is total solution for the labour shortage and rejuvenates the paddy cultivation in the study area with adequately trained skilled, committed labourers force in agricultural mechanization. It is not just a model for profit making but it is a social venture which helps the farming community by boosting up paddy cultivation and contributing to food security. This good model can be scaled up with social responsibility and implemented with the support of institutional intervention.

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