



ANNEX- IV

FINDINGS - VOICE OF CUSTOMER



Abbreviation	Expanded Form
IDEI	International Development Enterprises (India)
KB	<i>Krishak Bandhu</i>
UP	Uttar Pradesh
OR	Orissa
KAR	Karnataka
GJ	Gujarat
BH	Bihar
JH	Jharkhand
CG	Chhattisgarh
WB	West Bengal
UK	Uttarakhand
MP	Madhya Pradesh
MH	Maharashtra
AP	Andhra Pradesh
STP	Surface Treadle Pump
SAS	Service after Sales
BPP	Bamboo Pedal Pump
TP	Treadle Pump
SC	Scheduled Caste
ST	Scheduled Tribe
OBC	Other Backward Caste

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I. EXECUTIVE SUMMARY:

Working with small holder farmers since 1991, International Development Enterprises (India), IDEI has been providing low cost irrigation solutions in 14 states of India. The KB Treadle Pump and Drip Irrigation Systems developed by IDEI target the small holders who have limited disposable income & can ill afford the conventional high cost irrigation system. Promoted and marketed under the brand name *Krishak Bandhu* (KB) - farmer's friend, because of its low cost, simpler and user friendly operation, IDEI has reached out to over 10,00,000 small holder farmers thereby impacting more than five million people.

The present study was conducted to assess the view of the KB customers who had purchased KB technologies during the period of November '07 to October '08. The primary objective of the study was to assess customer satisfaction in buying and using the product.

The salient findings of the study are:

Demographic profile of the respondents' shows that majority of the farmers belonged to the backward caste, scheduled tribes & scheduled castes.

Majority of the customers belonged to the backward & poor districts of the country.

The majority of the customers purchased between Nov 07 & March 08.

94% customers had received product on the same day or within two days of placing the order

More than 90% of the respondents expressed satisfaction with purchase experience.

Majority (99%) of the customers reported that they were satisfied with the KB product which they had purchased & were using. ***Majority (98%)*** of the customers reported that they would recommend the product to other farmers.

II. OVERVIEW:

Working with small holder farmers since 1991, International Development Enterprises (India), IDEI has been providing low cost irrigation solutions in 14 states of India. The KB Treadle Pump and KB Drip Irrigation target the small holders who have limited disposable income & can ill afford the conventional high cost irrigation system. IDEI has, over the past 17 years has reached out to over 10, 00,000 small holder farmers thereby impacting lives of more than five million people.

IDEI commissioned the present study Voice of Customer (VoC) among its customers who had purchased the products during the period of November '07 to October '08.

2.1 Objectives of the Study:

The primary objectives of the study are:

- a) Understand the customer satisfaction with product use
- b) Understand the customer satisfaction with product buying experience

2.2 Methodology:

The study adopted quantitative research design using a structured questionnaire. The **VoC sampling framework** is based on acceptance sampling based on sales achieved across the years, spread across four years.

The acceptance sampling is a statistical procedure which is used for accepting or rejecting a batch of products. The aim of acceptance sampling unit inspection is to ensure that the producer submits lots at a quality level that will be acceptable to the consumer. It provides the auditors with information on the size of sample to be selected and a set of rules and procedures, related to the AQL (Acceptable Quality Limit), which enables the auditors, having examined the sample, to decide on the acceptance or rejection of the lot.

The sampling design adopted for the KB products adheres to the sampling procedures specified by Bureau of Indian Standards (BIS). The sampling procedures provides for tables for Inspection by Attributes method of acceptance sampling system on a continuing stream of lots for Acceptance Quality Limit (AQL) specified. The procedure provides tightened, normal, and reduced plans to be applied for attributes inspection; for percent nonconforming or nonconformities per 100 units. The requisite sample size comes out to be 1,105.

2.3 Sample distribution:

The requisite sample size of 1,105 for first year (*present survey year*) is proportionally distributed to respective technology sales figures of the state. The sample size thus selected for each state in a year shall serve as the sample frame/panel for the selection lot in subsequent years. At next stage, within the state, requisite sample size shall be selected randomly from the list of technology users.

In order to draw sample size for second year, at first stage sample size of 1,105 shall be proportionally distributed to respective sales figure of first year and second year to decide on the requisite sample size for first year and second year. Further while selecting sample for first year, the requisite sample size for a state shall be selected randomly from the panel of technology selected for the first year. Second year sample size shall also be proportionally distributed to respective technology sales figures of the state and serve as the sample frame/panel for the selection lot in subsequent years. The requisite sample within state shall be selected randomly from the list of technology users.

In order to draw sample size for third year, at first stage sample size of 1,105 shall be proportionally distributed to respective sales figure of first year, second year and third year to decide on the requisite sample size for first, second and third year. Further while selecting sample for first year and second year, the requisite sample size for a state shall be selected randomly from the panel of technology selected for the first and second year. Third year sample size shall also be proportionally distributed to respective technology sales figures of the state and serve as the sample frame/panel for the selection lot in subsequent years. The requisite sample within state shall be selected randomly from the list of technology users.

In order to draw sample size for fourth year, at first stage sample size of 1,105 shall be proportionally distributed to respective sales figure of first year, second year, third year and fourth year to decide on the requisite sample size for first, second, third and fourth year. Further while selecting sample for first, second and third year, the requisite sample size for a state shall be selected randomly from the panel of technology selected for the first second and third year. Fourth year sample size shall also be proportionally distributed to respective technology sales figures of the state and serve as the sample frame/panel for the selection lot in subsequent years. The requisite sample within state shall be selected randomly from the list of technology.

The total number of respondents was 1,105 KB users spread across 13 states & 160 districts. The questionnaire was developed and field tested. The respondents/samples were derived randomly from the universe of the farmers who had purchased KB technology between the

periods of November '07 to October '08. The achieved sample spread indicates the robustness in the sample & the representativeness of the universe.

2.4 Quality Assurance:

The field investigators were oriented with the survey instruments and mock exercises conducted to equip them with rigors of the data collection, sampling, and replacement of sample in case of the non-availability of the respondents. The collected data was scrutinized and coded for data entry purposes.

2.5 Data Analysis:

The analysis included various issues regarding the social groups, adoption of technology, the purchase experience, usage experience with the KB product.

2.6 Main Findings:

1.1 Respondent's Profile

The total number of sample size for the study was 1,105 which were spread across 160 districts of the country. (Refer **figure 2** for details). Overall the age range of respondents was between 20- 60 years. Majority of the farmers were in the age group of 50 years and above.

Figure 1: Respondents' Age profile in Percentage

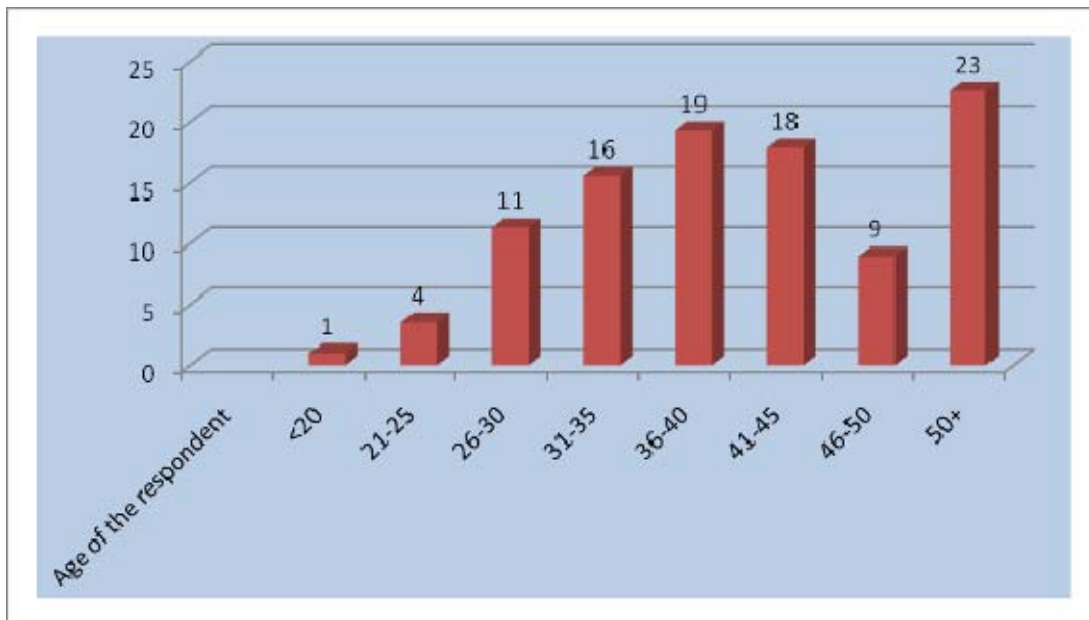
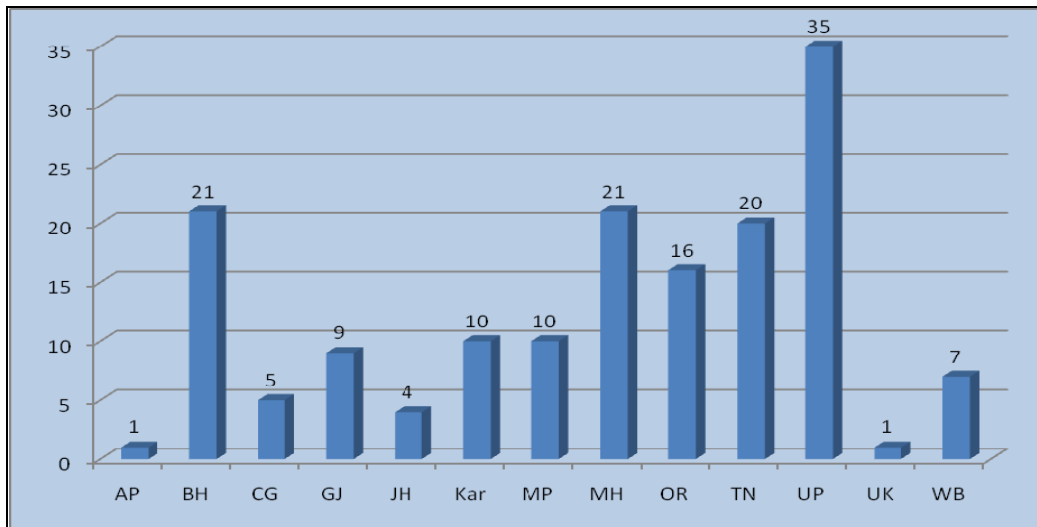
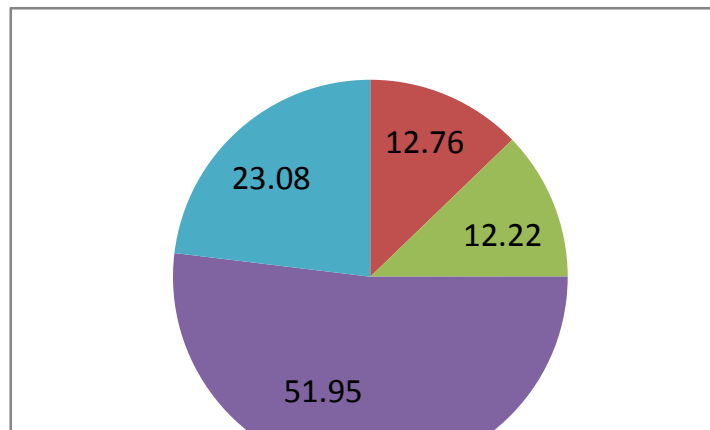


Figure 2: Sample spread across districts in Percentage



More than half (52%) of the respondents were in Other Backward Caste (OBC) category and a significant portion (25%) belonged to the Scheduled Caste (SC) & Scheduled Tribe (ST) communities. Across the states using Treadle pump & Drip, majority of the owners belonged to the OBC community (**refer table 1 & 2**). The representation from SC and ST was almost equivalent about 12% each. Refer to Figure 3 for details.

Figure 3: Respondents Caste profile in Percentage:



Respondents Profile with respect to Product Use across states:

Table 1: Treadle Pump

	Orissa	Bihar	Chhattisgarh	WB	UP	Uttarakhand	Jharkhand	MP
Caste								
SC	59 (42.1)	5 (3.8)	16 (64)	16 (20)	12 (5.4)		7 (35)	9 (18)
ST	8 (5.7)	22 (16.9)		29 (36.2)	56 (25.4)	3 (15)	3 (15)	5 (10)
OBC	40 (28.6)	57 (43.8)	8 (32)	9 (11.2)	111 (50.4)	11 (55)	8 (40)	27 (54)
General	33 (23.6)	46 (35.4)	1 (4)	26 (32.5)	41 (18.6)	6 (30)	2 (10)	9 (18)

(% in parenthesis)

Figure 4: Product Use by Caste -Treadle Pump

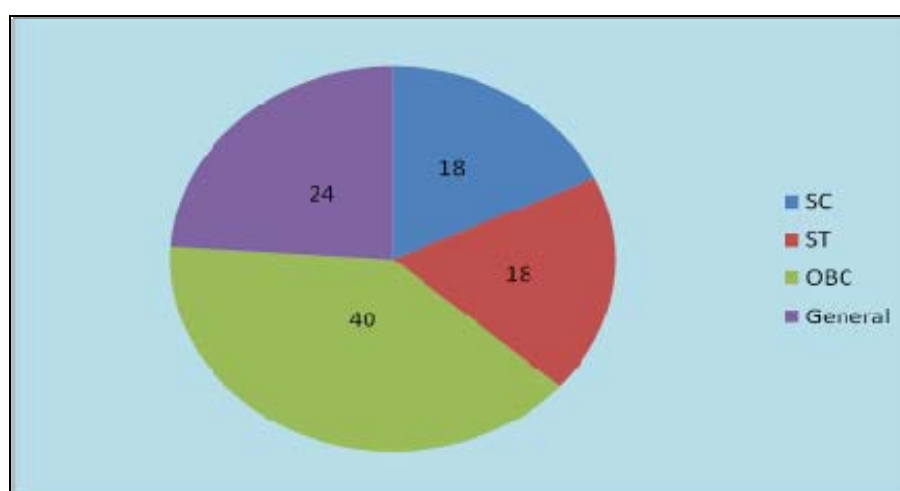
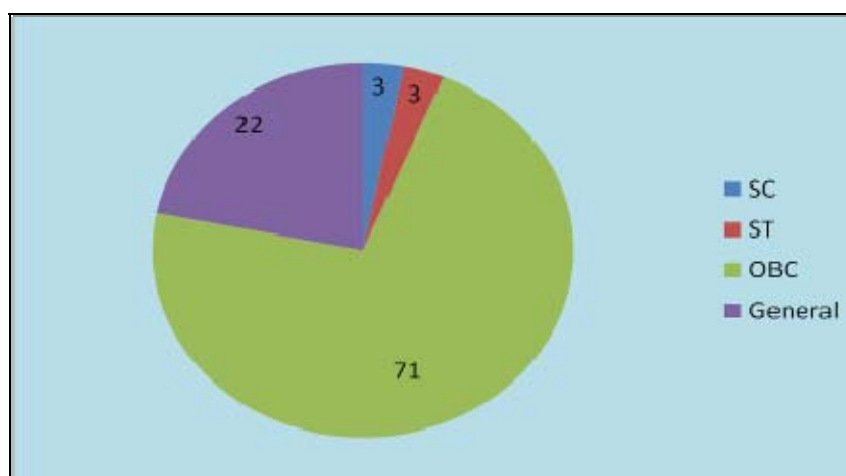


Table 2: KB Drip

	AP	GJ	KAR	MH	MP	TN
Caste						
SC		6 (20.6)	1 (1.8)	3 (2.7)	1 (1.2)	2 (1.4)
ST			3 (5.4)	7 (6.3)	2 (2.4)	1 (0.7)
OBC		8 (27.5)	35 (63.6)	54 (49)	74 (91.3)	129 (92.1)
General	5 (100)	15 (51.7)	16 (29)	43 (39)	4 (4.9)	8 (5.7)

(% in parenthesis)

Figure 5: Product Use by Caste- KB Drip

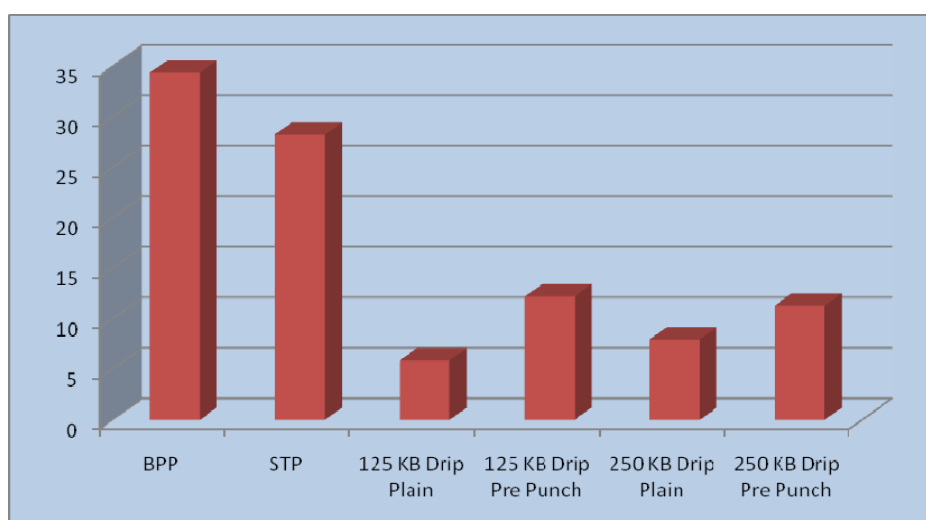


In the above Tables (1&2), across the states, the communities which have benefited most or have adopted KB products are the marginalized communities of OBC, ST & SC.

2.1 Type of Product Used

The respondents across the states reported use of KB products like the drip & Treadle pumps.

Figure 6: Adoption of KB Products, by the customers surveyed, across States



2.2 Purchase of KB

The respondents purchasing trend reveals that of the total KB's purchased, most of purchases occurred between November '07 and April '08. Of these, the highest numbers were purchased in the month of March '08. A significant numbers of KB products were also bought in November '07 and February '08. The purchases reflect a lower trend between the periods of May - October '08 which signifies the lower need for irrigation during this part of the year. This period of significant sales is co-terminus for the crops grown by majority of the KB farmers and can be attributed to the rise in purchases. Refer **Figure 7, 8, 9** for details.

Figure 7: Frequency % of KB purchases across months (TP & Drip) among Sample Surveyed:

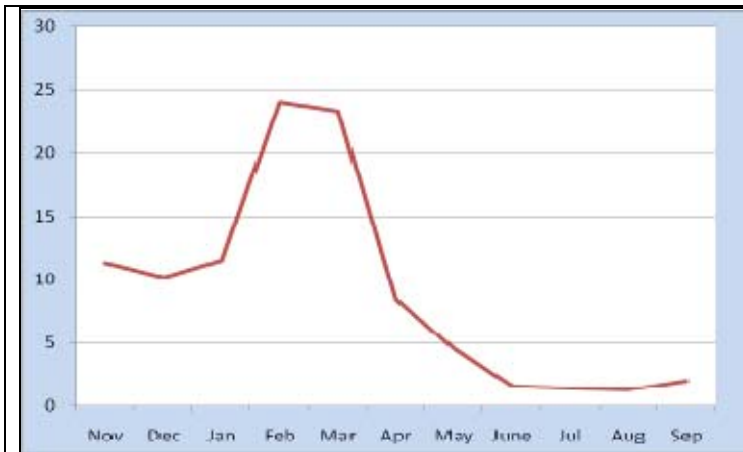
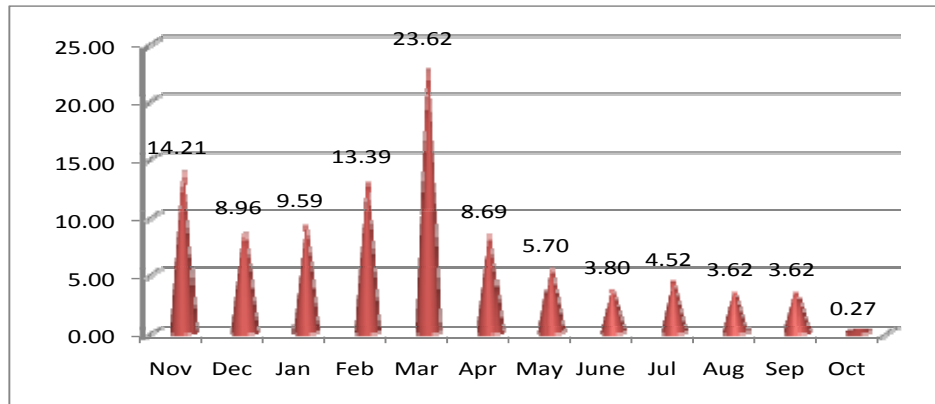


Figure 8: Trends in percentage of purchase of technology (TP) across months & states, by customers surveyed

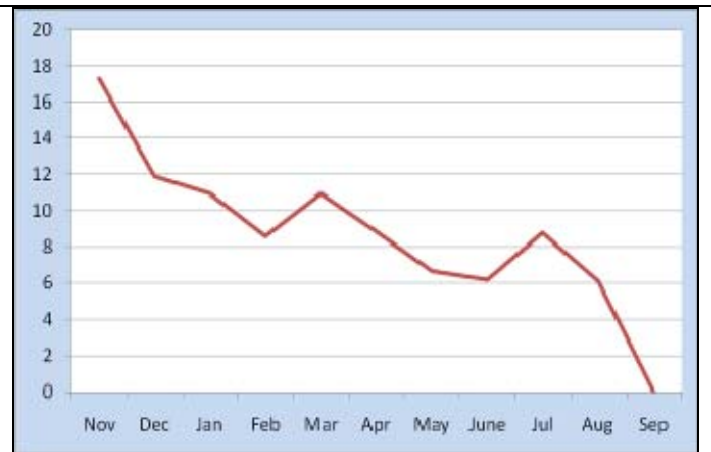


Figure 9: Trend in percentage of purchase of technology (Drip) across months & states, by customers surveyed

2.3 KB Product Delivery, Installation and Satisfaction of Purchase Experience

Table 3 represents the status of *delivery, installation and satisfaction* of KB products. Most of the respondents (**54.39%**) reported that the product was delivered on the same day of purchase. Majority (**40.6%**) of the ones not delivered on the same day were delivered within the period of *two days*. All most **97%** of the respondents were satisfied with the purchase experience. Few respondents also reported that they were somewhat dissatisfied with the purchase, but again the numbers were insignificant. (Refer Figures 10, 11, 12, 13, 14, 15, 16 & 17 for details)

Table 3: Status of Delivery, Installation and Satisfaction all KB Products

Inquiry Area	Number	%
Product Delivery		
Same day	601	54.3
Within two day	449	40.6
Within a week	21	1.9
In 10 days or more	34	3.0
Satisfaction level on the purchase experience		
Unsatisfactory	18	1.6
Somewhat dissatisfactory	15	1.3
Satisfactory	1072	97
How many days after purchase, the product was installed		
Same day	468	42.3
Within two day	535	48.4
Within a week	85	7.6
In 10 days or more	17	1.5
The Installation was done by		
Self	245	22.1
Involved IDEI Staff	429	38.8
Dealer	150	13.5
Village Mechanic	281	25.4
Total	1,105	

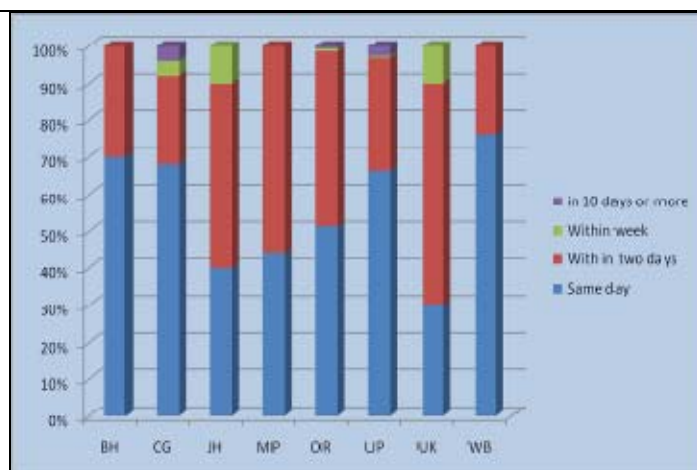


Fig 10: Product delivery, in percent, to customers surveyed across TP states

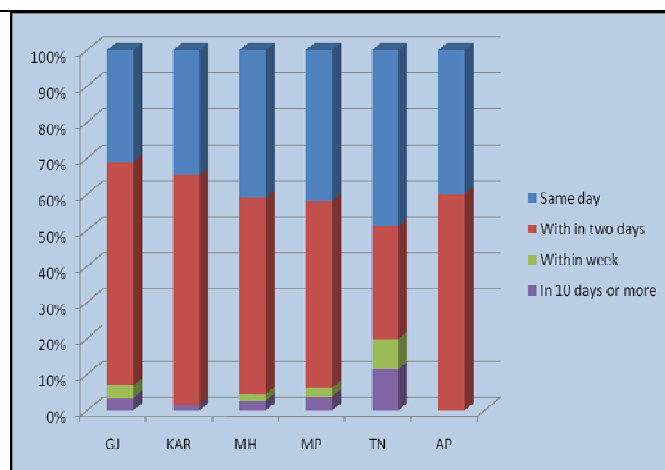


Fig 11: Product delivery, in percent, to customers surveyed across drip states

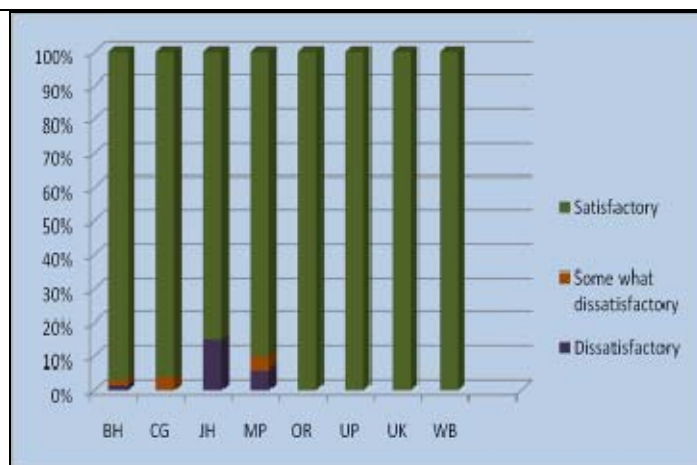


Figure 12: Satisfaction, in percent, on Purchase Experience across Treadle Pumps states

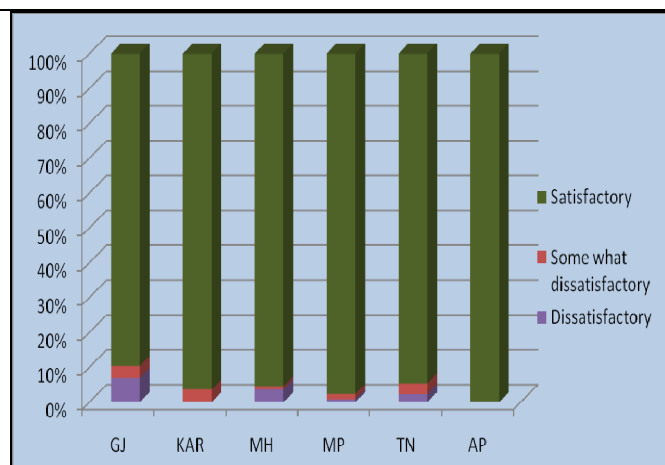


Figure 13: Satisfaction, in percent, on Purchase Experience across Drip states

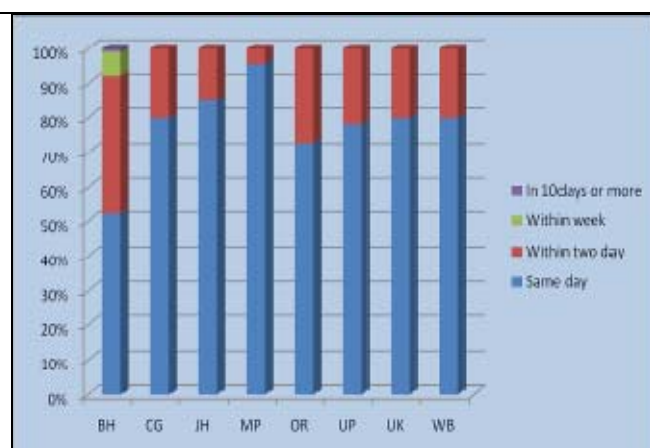


Figure 14: Installation, in percent, of Treadle Pumps after purchase across states

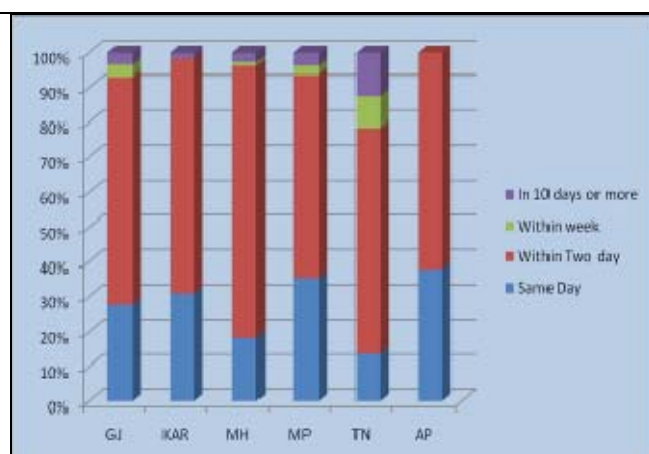


Figure 15: Installation, in percent, of Drip systems after purchase across states:

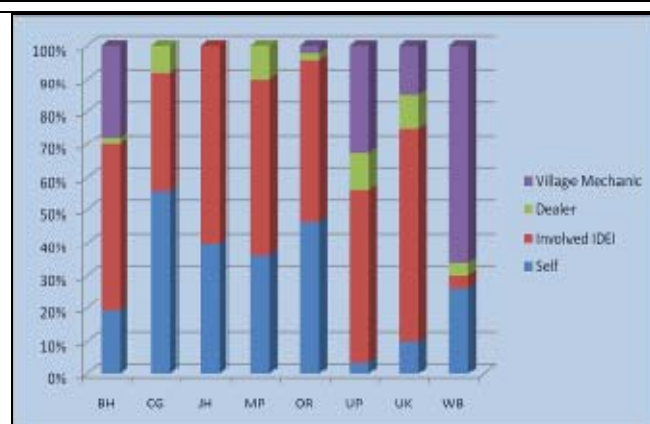


Figure 16: Installation facilitation, in percent, of Treadle pumps across states

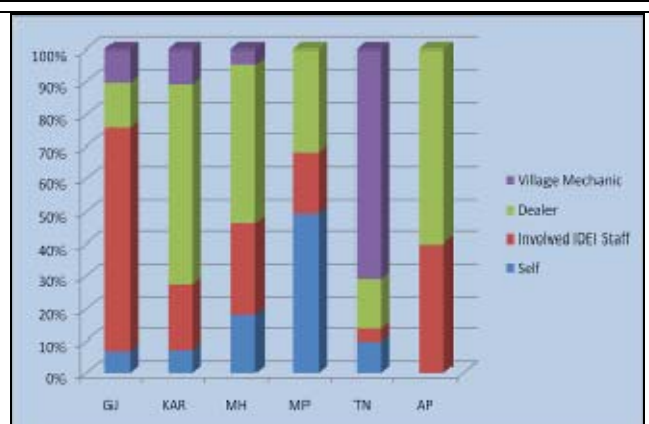
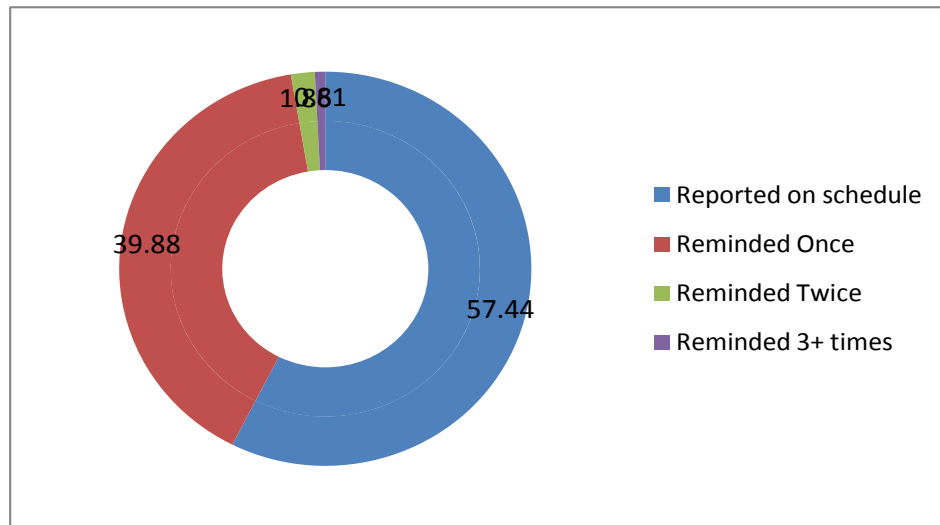


Figure 17: Installation Facilitation, in percent, of Drip across states

In terms of product installation majority of the time (90%) the product was installed within two days of the purchase. A few number of respondents (1.69%) also reported that it took 10 or more days for the installation process to be completed. As reported most of the time (38.82%) the installation was done by the involvement of IDEI Staff. This was followed by the village mechanic and farmers themselves. A few times installation was also done by the dealer. In cases when the installation was done by others, the installer mostly (**Figure 18, 19**) reported on schedule and in rest of the cases they had to be reminded once. Repeat reminders for undertaking the installation (two-three times) were very few.

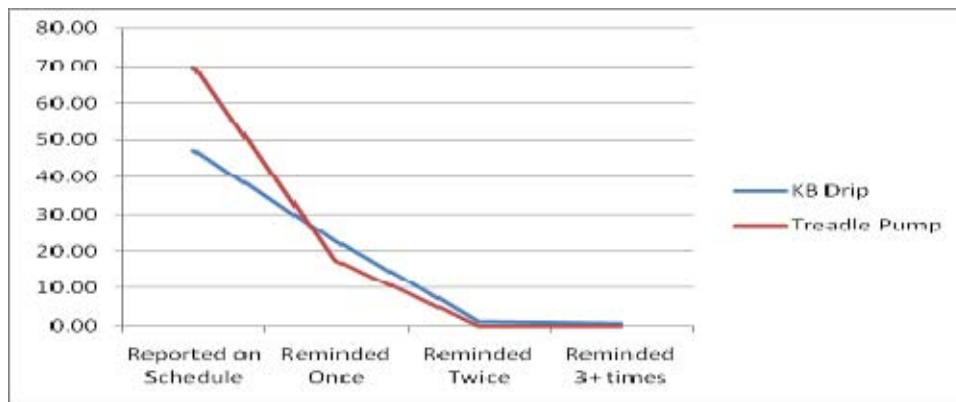
Figure 18: No. of times the KB customer contacted for installation



Throughout the process of installation a higher satisfactory level (98.72 %) emerged and very few of the total consumers expressed their dissatisfaction (1.28%).

To summarize one can conclude that the customer satisfaction is dependent on the swift services of delivery and installation. Also across responses, the village mechanic has emerged as an important person who has contributed as support towards the installation of the KB products.

Figure 19: Follow up for Installation across KB program



2.4 KB Warranty Card and Problem status

Of the total consumers almost all had the warranty card (97.7%). When asked for problems, post installation, majority (93 %) of the consumers did not face any problems with KB products.

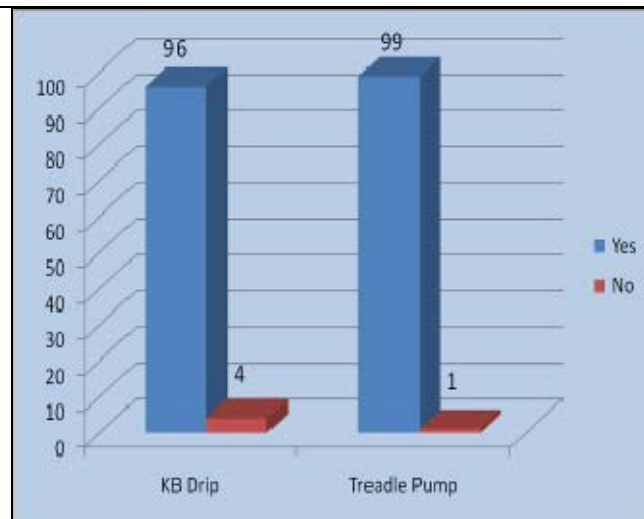


Figure 20: Percentage of KB Customers with Warranty Cards

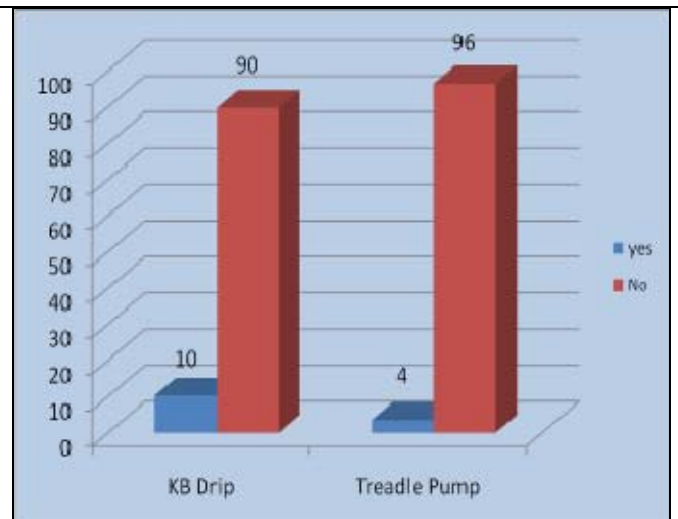


Figure 21: Percentage of post installation problems across KB products

The respondents (n- 67) who had problems were further asked about the contact person, other than self, in the post installation problem. Of the total, most of the respondents (n-51) contacted the village mechanic and very few contacted the IDEI dealer.

Most respondents (58.82%) said that problem was resolved on the same day of reporting. In cases where the consumers were not attended on the same day, the problem was resolved in a span of two days (27.45%). Also in such cases all the customers were satisfied (100%) with the services they received in resolving post installation problems.

2.5

Customer Satisfaction

Figure 22: Percentage of Overall Satisfaction with KB Products

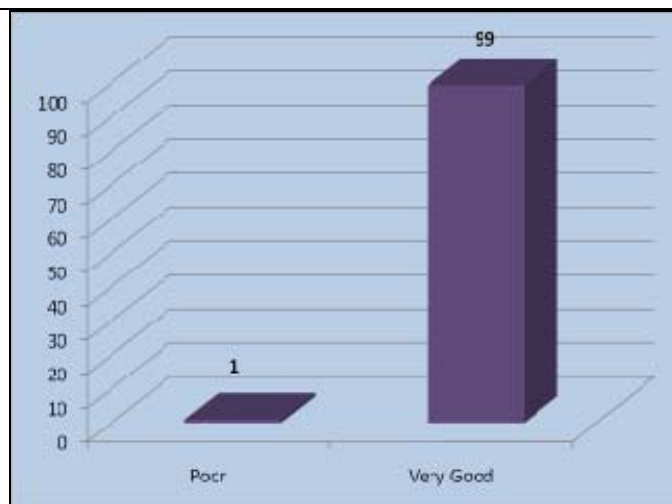
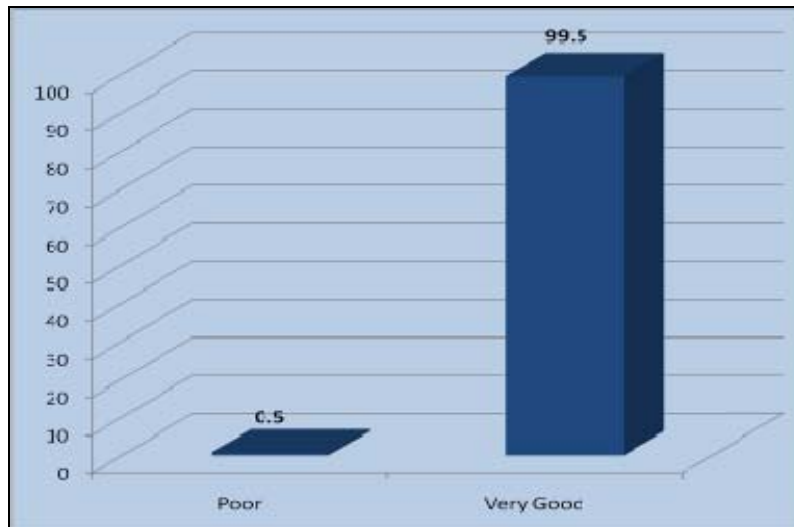


Figure 23: Percentage of those satisfied with KB Drip

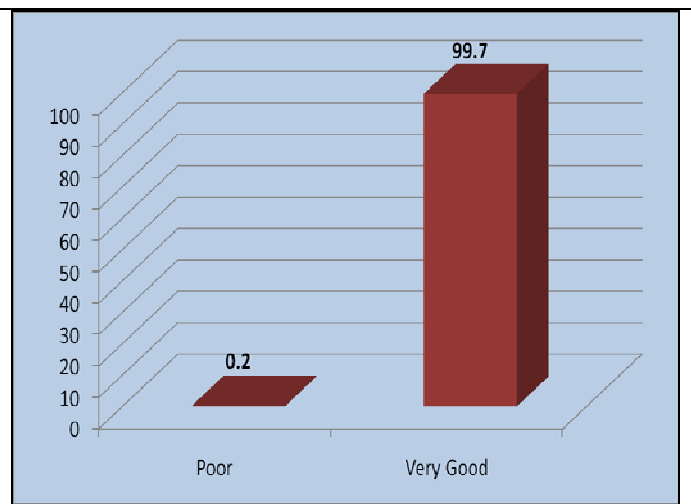


Figure 24: Percentage of those satisfied with TP

All most all the *consumers* (99.10%) (Refer Figure 22, 23, 24) found the product to be extremely useful. Most of the consumers (98.55%) *responded that they will recommend the product to others* and also rated their *overall experience with KB as very good* (99.46 %). Overall the data in the present section also reflects on the extensive and critical role of the village mechanic in the maintenance of the KB products.

III. CONCLUSION

The overall data represents a **high level of satisfaction amongst the customers**, with the KB products. Some of the other key highlights include –

- The Service After Sales (SAS) has emerged as a critical indicator of customer satisfaction
- Most of the customers expressed that they would recommend the product to others; which also reflects that the individual customers are also potential advocates of the product.
- The installation & follow up process has also been appreciated by a large number of customers; as it was carried out almost immediately
- The role of the village level mechanics has also been seen to be critical; as apart from the IDEI staff, they have played an important part in correct installation
- In the coming year, data would also be collected on wear and tear issues of the KB product as well as availability of spare parts.