

Voice of Customers

2010

Contents**Page No**

• Abbreviations.....	3
• Executive Summary.....	4
• Objectives of the Study.....	5
• Methodology.....	5
• Demographics of the Sample.....	7
• Purchase & Delivery of KB Products.....	8
• Installation of KB Products.....	12
• Post Installation Problems & After Sales Services.....	17
• Overall Satisfaction with KB Products & Services.....	23
• Conclusion.....	24

Abbreviations

IDEI	International Development Enterprises (India)
KB	<i>Krishak Bandhu</i>
UP	Uttar Pradesh
MP	Madhya Pradesh
AP	Andhra Pradesh
TP	Treadle Pump
BPP	Bamboo Pedal Pump
STP	Surface Treadle Pump
SAS	Service after Sales
SC	Schedule Caste
ST	Schedule Tribe
OBC	Other Backward Castes

Executive Summary

International Development Enterprises, India (IDEI), has been promoting low cost water lifting technology (Treadle Pumps) in eastern India and high water table regions, and low cost water application technology (drip irrigation) in western and Southern India, predominated by semi arid regions. The low cost technologies have been developed targeting small and marginal farmers as prospective buyers who find conventional high cost irrigation systems unaffordable. The products are being promoted and marketed under the brand named Krishak Bandhu (KB) – which means Farmer's Friend, because of its low cost, simpler and user friendly operation.

The current report states the views of the KB customers who had purchased and used KB Treadle Pump (TP) and KB Drip during the period November 2007 to October 2010. The primary objective is to understand customer satisfaction with respect to KB purchase, installation and usage.

The salient findings of the study are:

- Majority (63%) of the respondents were smallholders who belonged to SC & ST and OBC categories.
- The product was delivered to majority (89%) of the respondents within one or two days of purchase order.
- 91% of the respondents were assisted in installation of the product within a day or two of purchase.
- Post installation problems were resolved within one or two days of report for 92% of the respondents.
- More than 99% respondents expressed satisfaction with the product, and services provided.
- 99.99% respondents reported that they would recommend the product to others.

Objectives of the Study:

IDEL commissioned the present study “Voice of Customer” amongst its customers who have had purchased and used KB Treadle Pump or KB Drip during Nov. 2007 to Oct. 2010. Following are the objectives of the study:

- a) Understand the customer satisfaction with KB product across years
- b) Understand the customer satisfaction with the services provided during purchase, installation and use of KB products.

Methodology

The Voice of Customer (VoC) study adopted quantitative research design using a structured questionnaire. The sampling framework derives from acceptance sampling, based on sales achieved across the years, spread across four years.

Acceptance sampling is a statistical procedure used to accept or reject a batch of product. The aim of acceptance sampling unit inspection is to ensure that the producer submits lots at a quality level that is acceptable to the consumer. It provide auditors with information on the size of sample and a set of rules and procedures, related to the AQL (acceptable quality limit), which enables to decide on the acceptance or rejection of the lot.

The sampling design adopted for the KB products adheres to Bureau Indian Standards (BIS) specified sampling procedures for Inspection by Attributes method of acceptance sampling system on a continuing stream of lots for Acceptance Quality Limit (AQL) specified. The procedure provides for tightened, normal, and reduced plans, which are to be applied for attributes inspection for percent nonconforming or nonconformities per 100 units. The requisite sample size for the study comes out to be 1105.

Sample Distribution:

The requisite sample size of 1105 for first year (2007-08) was distributed in proportion to KB sales figures of the respective state (The sample size thus selected for each state in a year shall serve as the sample frame/panel for the lot selection in subsequent years). Within the state, requisite sample size was selected randomly from the list of KB users.

In order to draw sample size for second year (2008-09) – 1) To arrive at requisite sample size for first year and second year, sample size of 1105 was distributed in proportion to respective sales figure for first year and second year. Further, for selection of sample for first year, the requisite sample size for a state was determined randomly from the panel of KB users selected for the first year. 2) Second year sample size was also proportionally distributed based on KB sales figures of respective states (and this shall serve as the sample frame/panel for the selection lot in subsequent years). The requisite sample within a state was selected randomly from the list of KB users.

In order to draw sample size for third year (2009-10)– 1) To determine requisite sample size for first, second and third year, sample size of 1105 was proportionally distributed based on respective sales figure for first year, second year and third year. Further, for selection of sample for first year and second year, the requisite sample size for a state was determined randomly from the panel of KB users selected for the first and second year. 2) Sample size for third year was also proportionally distributed based on KB sales figures of the respective states (and this shall serve as the sample frame/panel for the selection lot in subsequent years). The requisite sample within a state was selected randomly from the list of KB users.

In order to draw sample size for fourth year – 1) To determine the requisite sample size for first, second, third and fourth year, sample size of 1105 shall be proportionally distributed based on respective sales figure for first year, second year, third year and fourth year. Further for selection of sample for first, second and third year, the requisite sample size for a state shall be selected randomly from the panel of KB users selected for the first second and third year. 2) Sample size for fourth year shall also be proportionally distributed based on KB sales figures for respective states (and shall 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 KB users.

The total number of respondents was 1105 KB users spread across 14 states & 246 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 Nov 2007 to Oct 2010. The achieved sample spread indicates the robustness in the sample & the representativeness of the universe.

1. Demographics

The study involved a total of 1105 respondents spread across 246 districts in 14 states of the country. Figure 1.1 shows the number of districts covered in each of the states. Madhya Pradesh is the only state from which there are respondents for TP as well as Drip Systems.

Figure 1.1: Districts Covered Across States

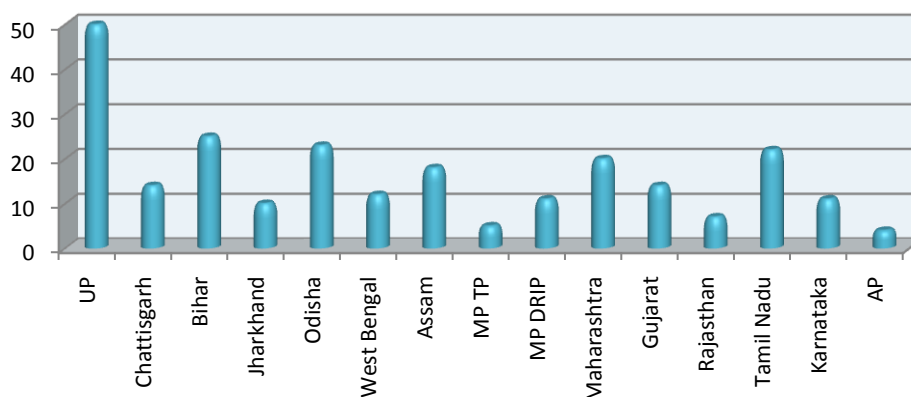
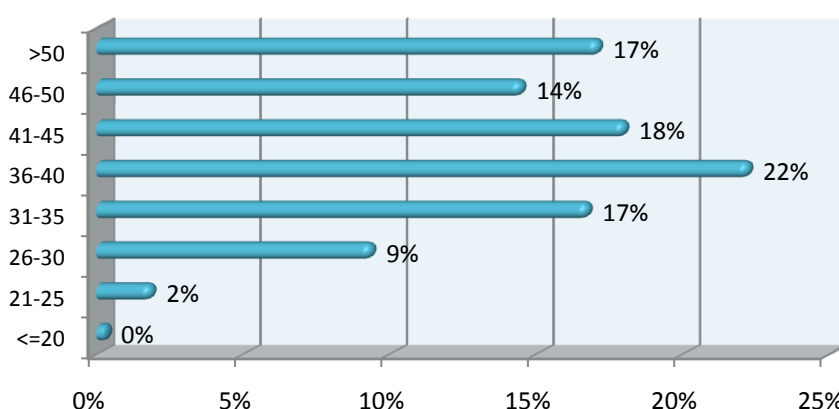


Figure 1.2: Age Group of Respondents



The age range of the respondents was 20-77 years with majority in the age group of 36-40 years. The respondents have been broadly categorized as users of TP and Drip Systems. However there are variants for each of the products viz. BPP for and STP for TP, and, 125 μ plain, 125 μ prepunch, 250 μ plain and 250 μ prepunch in for Drip Systems.

KB technology was widely adopted across all sections of society and marginal sections in particular. Overall, 37% of the respondents were from General Category, 38% from Other Backward Class and one fourth or 25% from Scheduled Castes & Scheduled Tribes. Figure 1.3a and 1.3b show the caste distribution of respondents using TP and Drip systems respectively.

Figure 1.3a: Caste Groups of Respondents Using TP

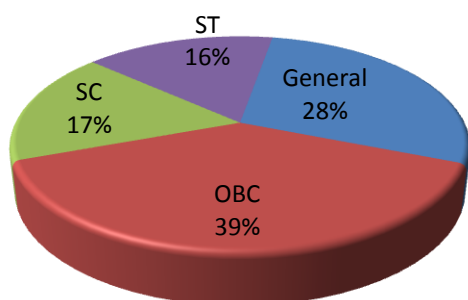
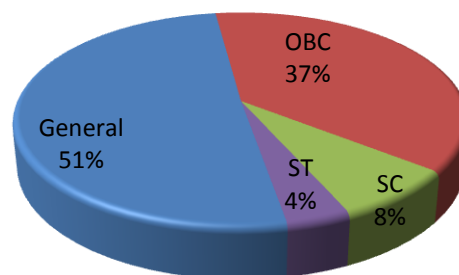


Figure 1.3b: Caste Groups of Respondents Using Drip



Overall, **63% of all belong to SC & ST and OBC categories**, which are generally considered as economically backward sections.

2.1 Purchase & Product Delivery

Majority (three fourth or 75%) of the respondents reported that the product was delivered to them the very day purchase order was placed. For 14% the product was delivered within two days and for the 10.5% within a week. It took ten or more days only in case of 0.5 % of respondents. The reasons for delay in delivery were primarily stock outs at dealer/distributor level and large distance of the villages from dealer location which lead to difficulties in transportation. (Refer to figures 2.1a, 2.1b, 2.1.c, 2.1d and 2.1e)

Figure 2.1a: Product Delivery to Customers Across States during 2007-08

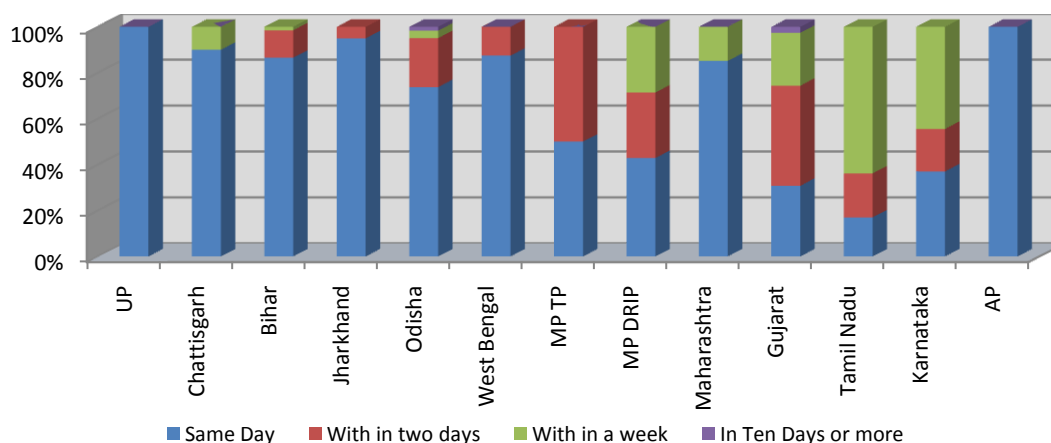


Figure 2.1b: Product Delivery to Customers Across States during 2008-09

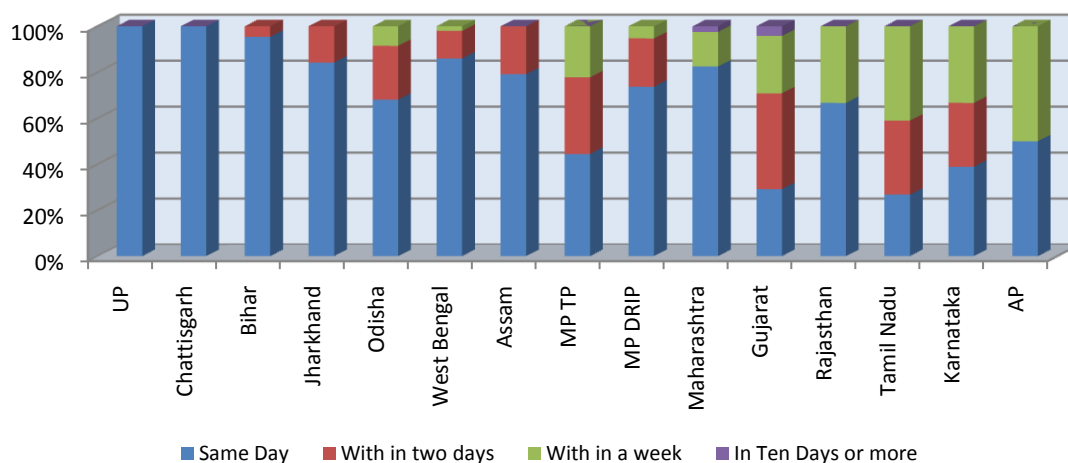


Figure 2.1c: Product Delivery to Customers Across States during 2009-10

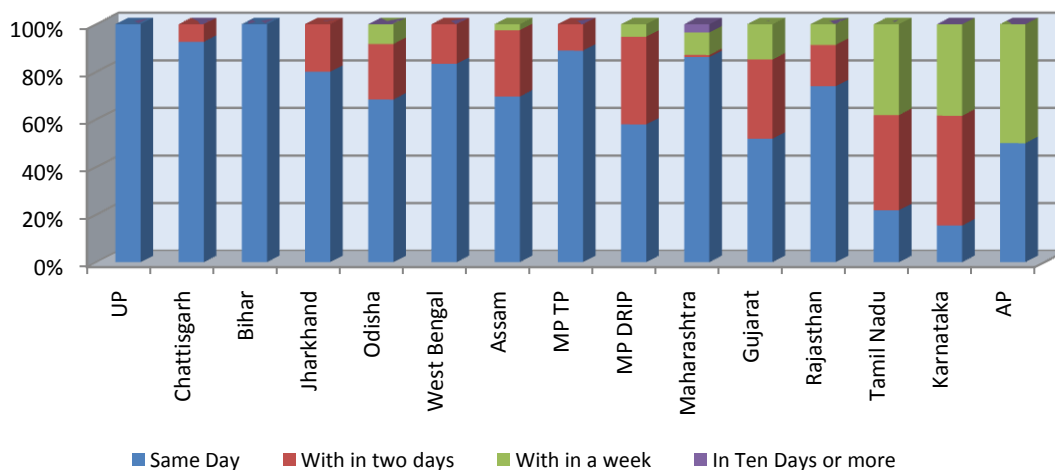


Figure 2.1d: Reasons for Product Not Being Delivered on the Same Day of Purchase (TP Areas)

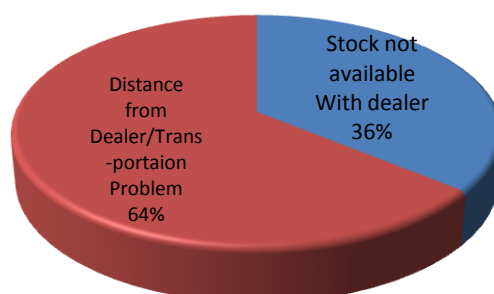
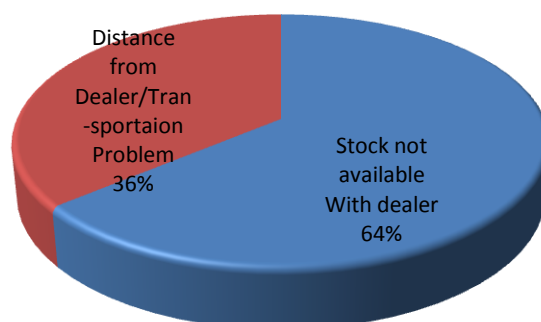
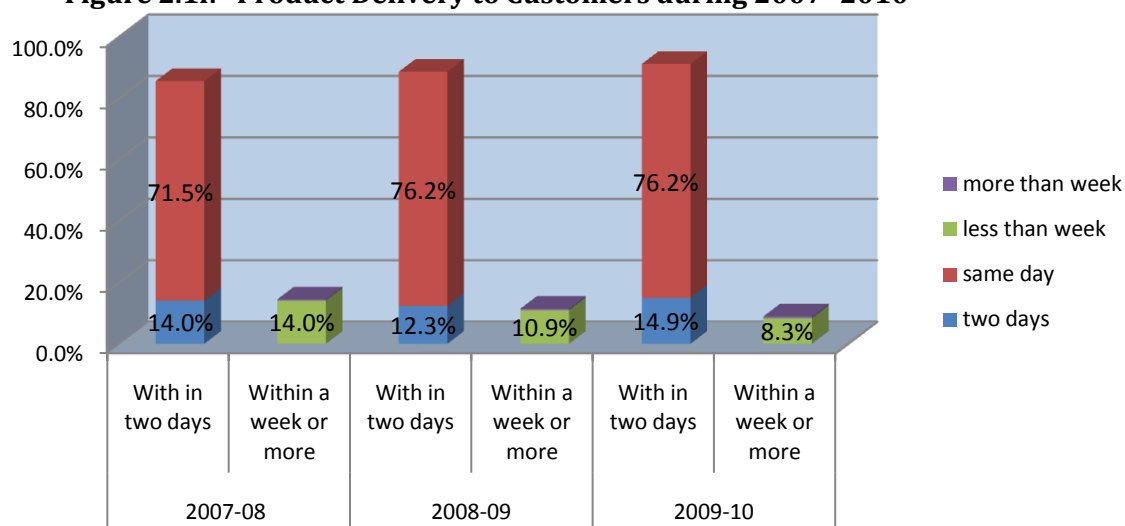


Figure 2.1e: Reasons for Product Not Being Delivered on the Same Day of Purchase (Drip Areas)



Remote location of smallholders in TP areas was a major hurdle in carrying the product on the day of purchase. Further expansion of supply chain and development of VBMs will decrease such incidences. On the other hand, stock out was the major reason in Drip areas. It was observed that 60% of such cases of stock out happen during the months of January to June. This is actually the peak sales period when the demand surges because of the necessity to irrigate rabi and zaid crops. Therefore IDEI needs to work on servicing orders by dealers with in T+1 day so that such incidences decrease. Information on delivery of products confirms that services have improved over years. Figure 2.1f explains that while 14% of the respondents received the product after T+1 day in 2007-08, it reduced to 11% during 2008-09 and further to 8% during 2009-10.(T refers to day one when purchase order was placed).

Figure 2.1f: Product Delivery to Customers during 2007- 2010



Data on respondent' experience with purchase of KB Products shows that **99.5% of them were satisfied**. Less than 1% who were dissatisfied quoted the reasons to be stock out and price of the product. Majority of the respondents across all the states expressed that purchase process was

hassle free (Figure 2.1g, 2.1h). Figure 2.1i further explains the respondent's opinion on purchase of both TP and Drip System.

Figure 2.1g: Respondents' Satisfaction With Purchase Experience (TP Users)

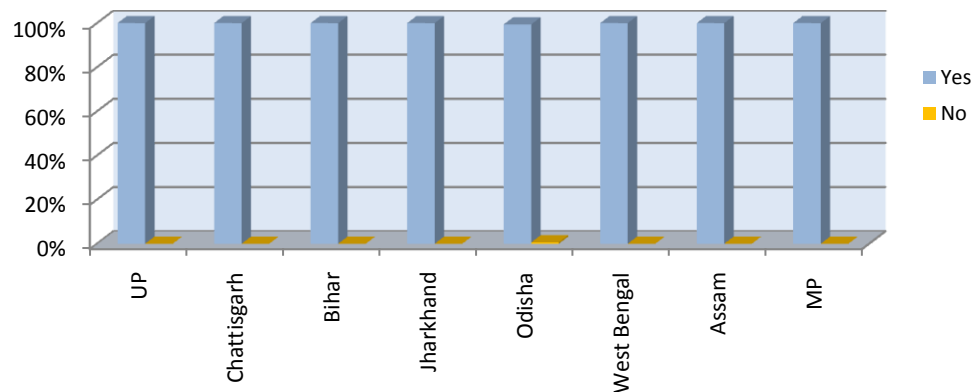


Figure 2.1h: Respondents' Satisfaction With Purchase Experience (Drip Users)

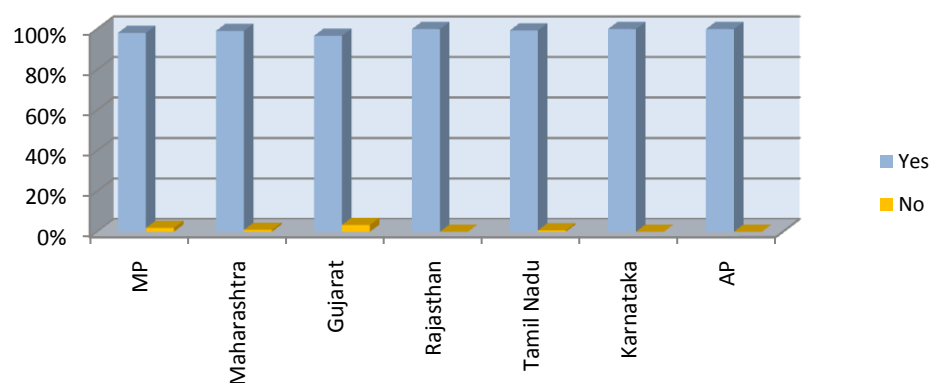
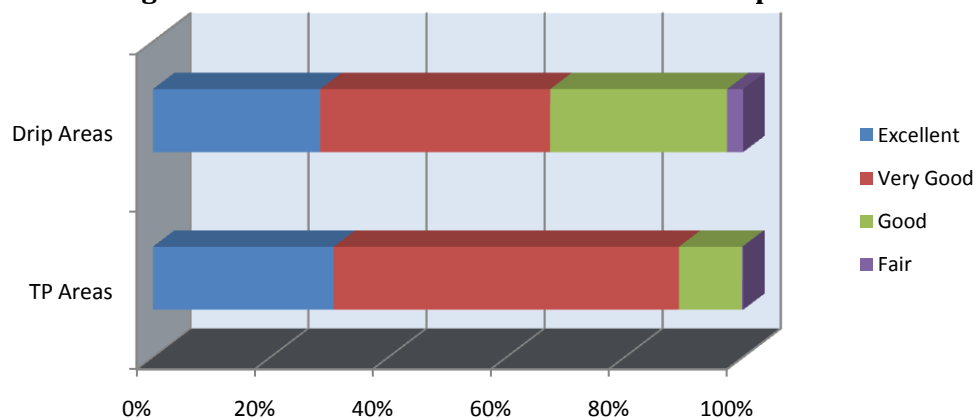


Figure 2.1i: Satisfaction Level with Purchase Experience



2.2 Installation of KB Products

For installation of KB Products, the small holders usually relied on VBMs, dealers or IDEI staff. VBMs, located in the villages, were contacted in majority of the cases (67%), followed by IDEI staff (22%) who have been assisting in this process for years. In few cases (11%) dealers also helped the smallholders with installation. While this was the case for 77% of the respondents, 23% had got the product installed in their agricultural lands themselves. They could do this because of their knowledge and understanding of technology and help from fellow farmers who have been using the technology.

For smallholders who got the product installed through others, the **job was done within two days of purchase in 91% cases**. It was installed on the same day of purchase for 45.5 %, within two days for 45.5 %, within a week for 8.5% and in ten days or more for 0.5% of the respondents. Data on reporting schedule of IDEI Staff, VBMs and dealers were also considered to understand their response to service requests. Analysis of the data shows that concerned persons report on time in 65% cases, for 30% they had to be reminded once, reminded twice for 4% and three or more time for 1%. Figures 2.2a, 2.2b, 2.2c, 2.2d, 2.2e, 2.2f, 2.2g, 2.2h, 2.2i, 2.2j, 2.2k explain the installation process across all the states.

Figure 2.2a: Installation of TP After Purchase during 2007-08

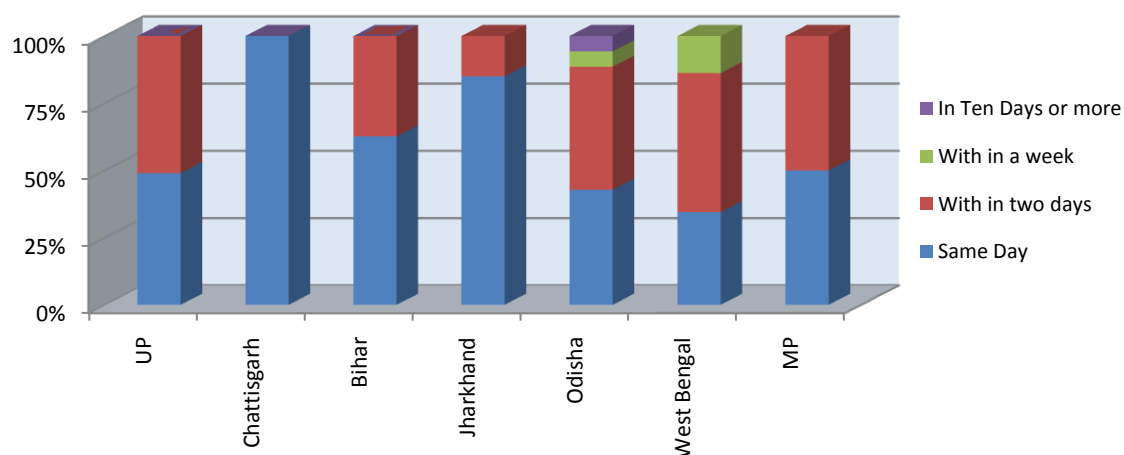


Figure 2.2b: Installation of TP After Purchase during 2008-09

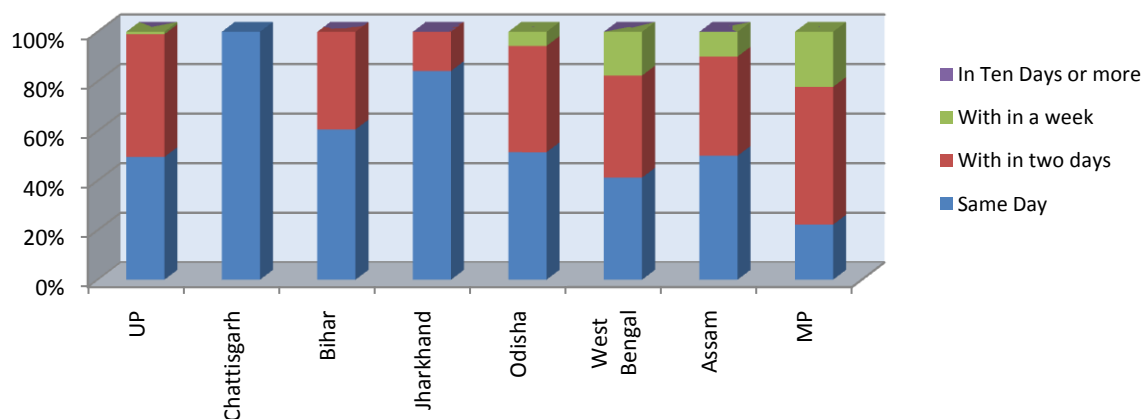


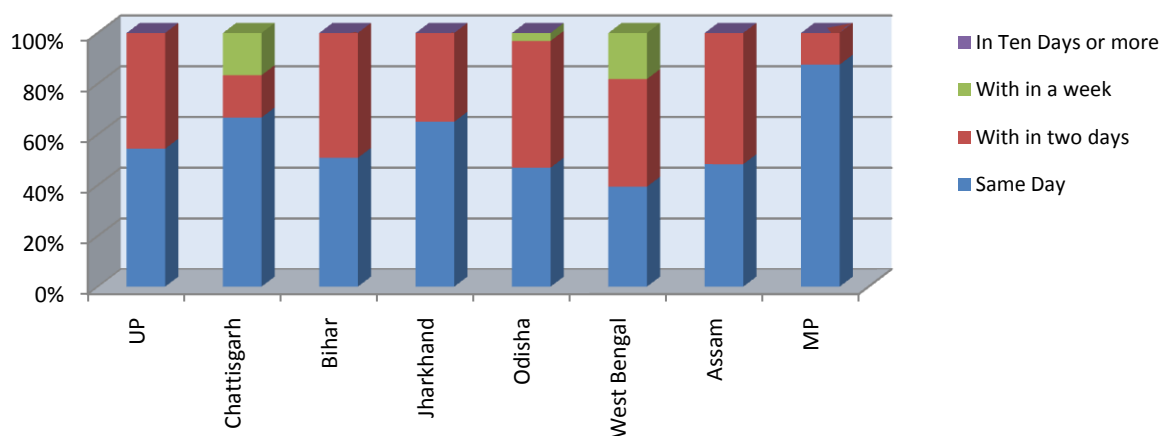
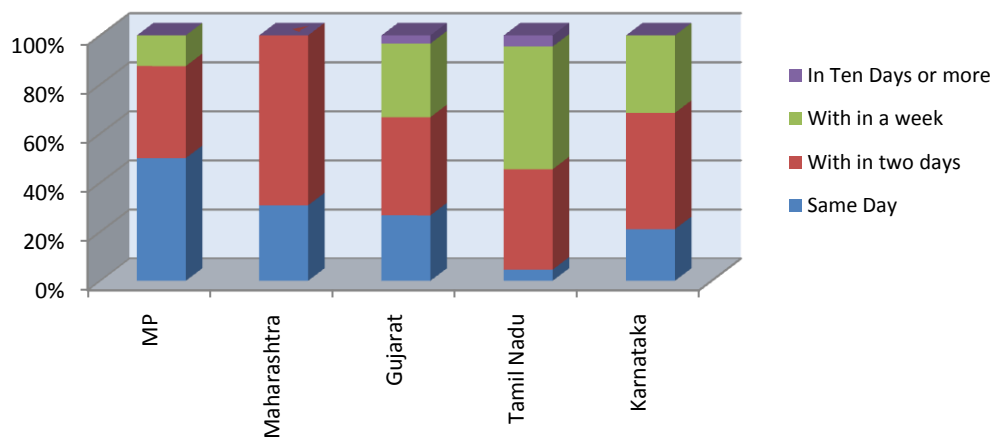
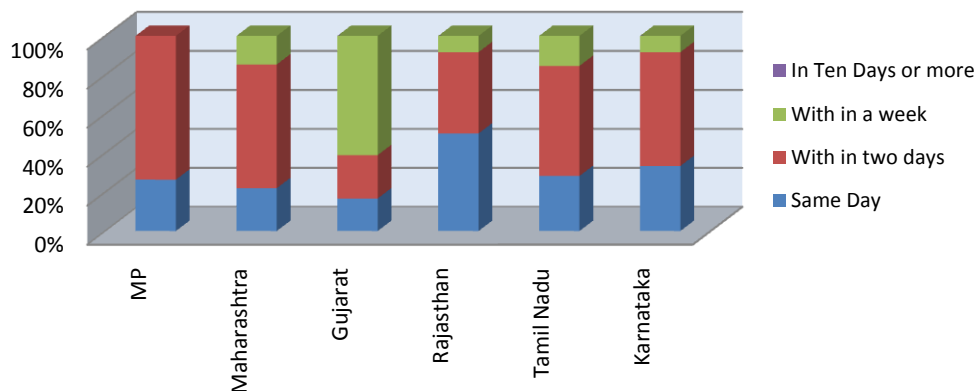
Figure 2.2c: Installation of TP After Purchase during 2009-010**Figure 2.2d: Installation of Drip After Purchase during 2007-008****Figure 2.2e: Installation of Drip After Purchase during 2008-09**

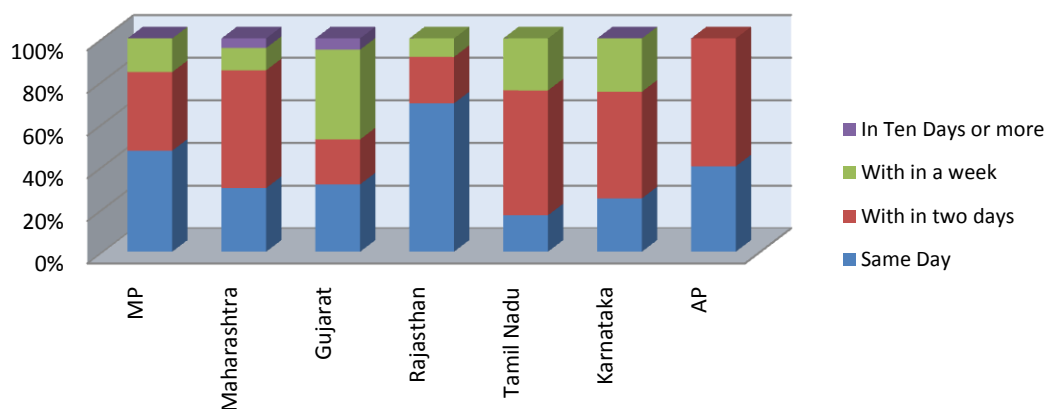
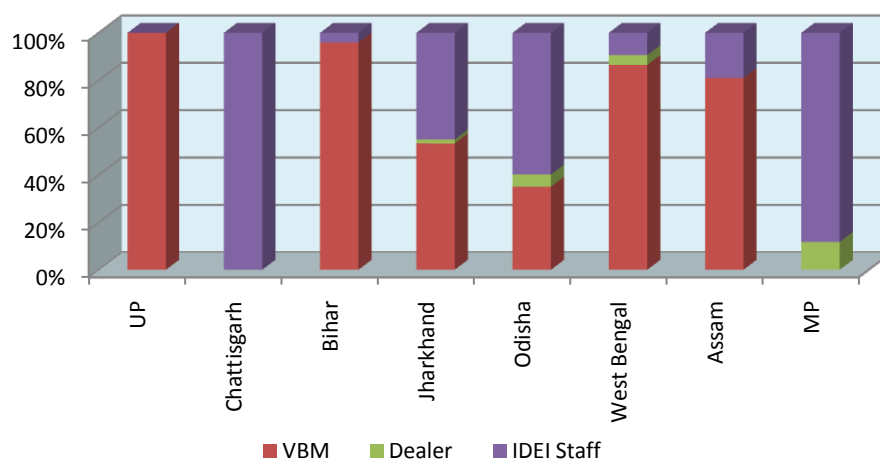
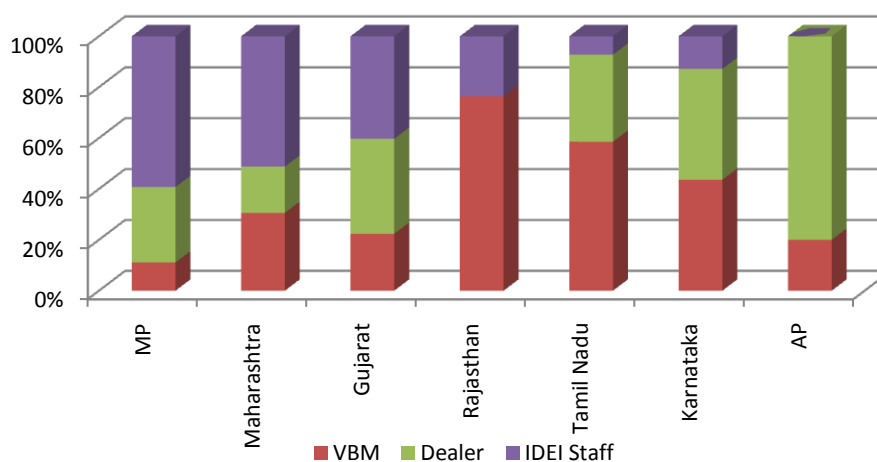
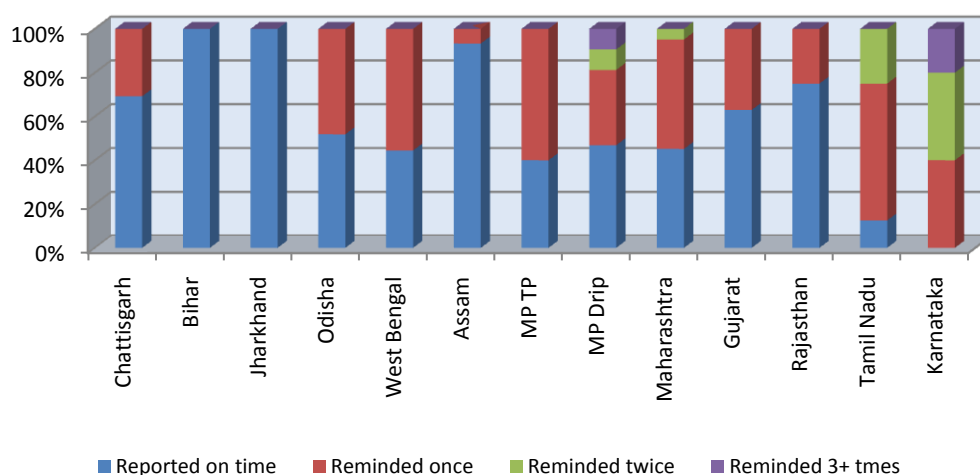
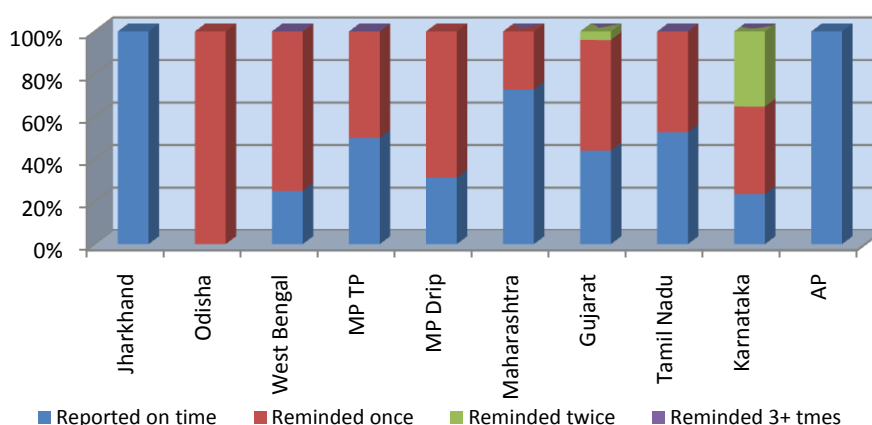
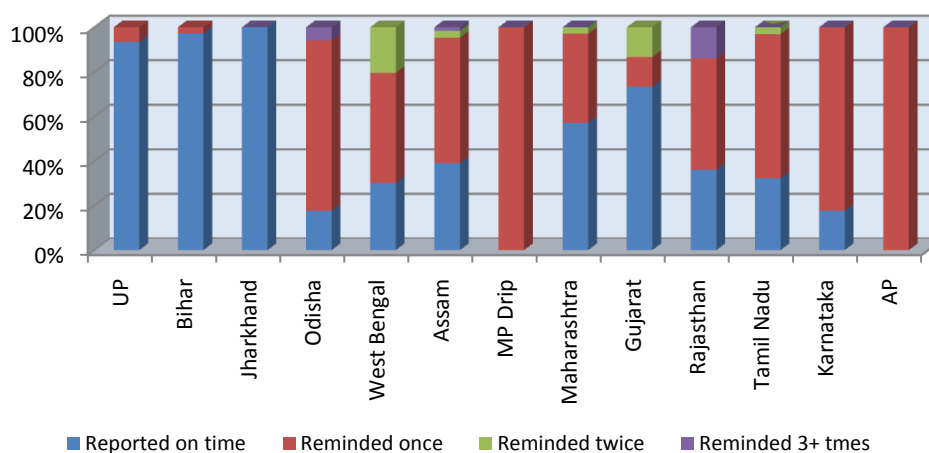
Figure 2.2f: Installation of Drip After Purchase during 2009-010**Figure 2.2g: Facilitating Agents for Installation of TP****Figure 2.2h: Facilitating Agents for Installation of Drip**

Figure 2.2i: Reporting by IDEI Staff for Installation of TP & Drip**Figure 2.2j: Reporting by Dealers for Installation of TP & Drip****Figure 2.2k: Reporting by VBMs for Installation of TP & Drip**

Since the products were installed in time and the smallholders were provided with proper assistance, all the respondents expressed satisfaction with the installation services. **92% of the respondents using TP and 70% of those using Drip Systems rated the service as excellent or very good.** Figures 2.2l, 2.2m, 2.2n explain respondent's opinion on installation services provided to them.

Figure 2.2l: Respondents' Satisfaction with Installation Process (TP Areas)

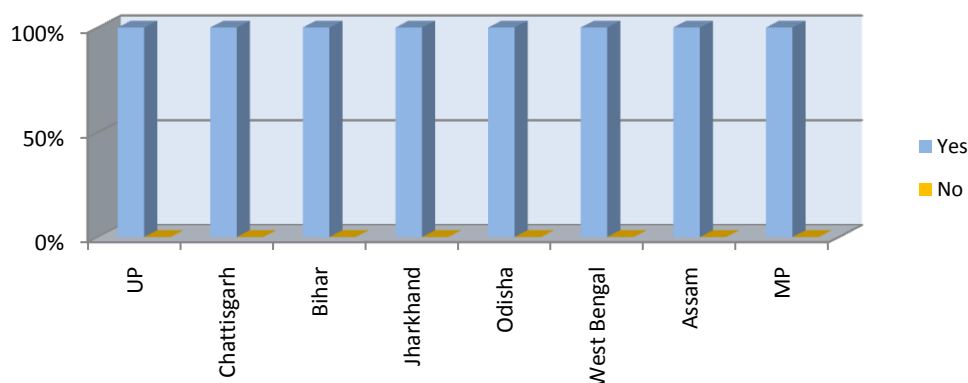


Figure 2.2m: Respondents' Satisfaction with Installation Process (Drip Areas)

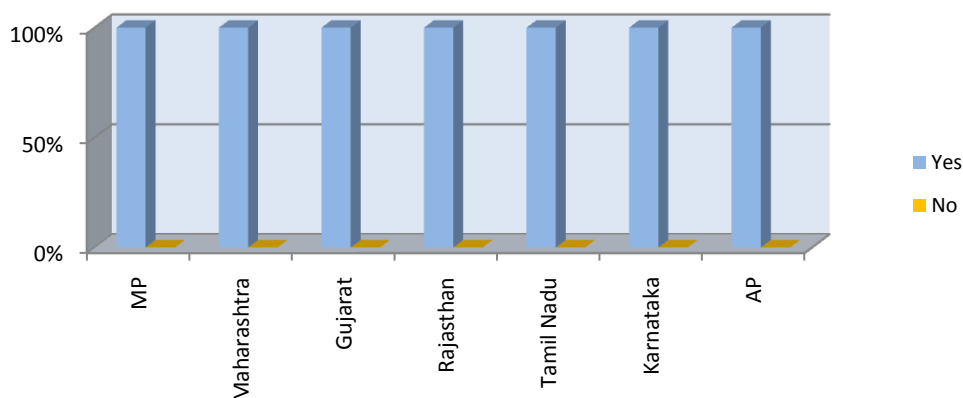
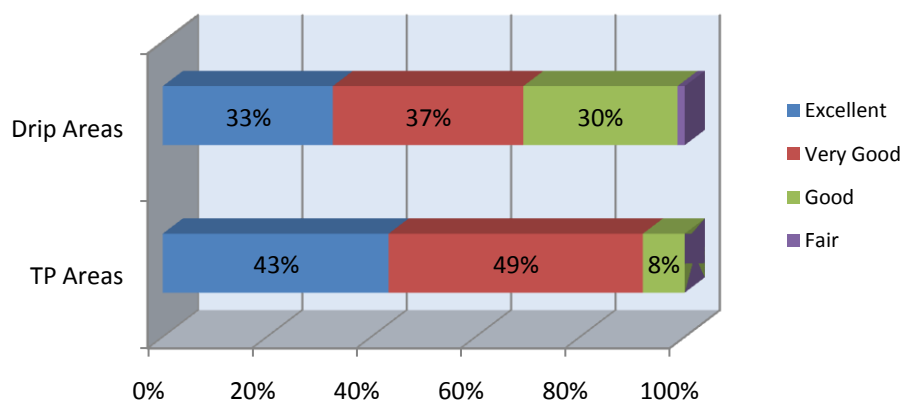


Figure 2.2n: Satisfaction with Installation Services



2.3 Post Installation Problems & After Sales Services

The respondents were inquired about the problems that they commonly faced with the products over a period of usage, and how they were resolved. Overall, 47% reported that were one or more problems and 53% reported that they had not experience any problem. An analysis of the problems reported shows that **100% of them were minor**, e.g.

- Need for replacing the washer in TP
- Loosening of nuts and bolts in TP
- Welding Problems in TP
- Clogging of discharge tubes/microtube emitters in Drip Systems
- Uneven punching in laterals in Drip Systems

Figures 2.3a and 2.3b explain the instances of post installation problems and the problem types in case of TP and Drip Users respectively.

Figure 2.3a: Post Installation Problems in TP Areas

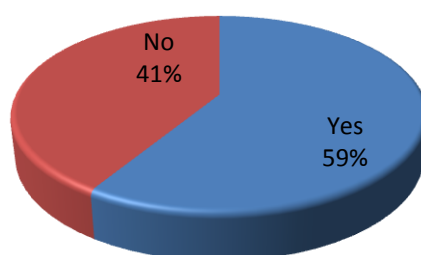
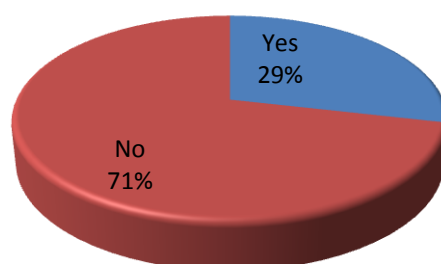


Figure 2.3b: Post Installation Problems in Drip Areas



Since most of the post installation problems were minor, majority of the respondents (47%) managed repairing or correcting it themselves. When they needed an external assistance, IDEI staff were consulted mostly (23%), followed by VBMs (18%) and Dealers (12%). For most of the respondents (92%) the problems were resolved in a day or two and in a week time for rest 8%. **Most of the service requests (94%) were attended on time** or the concerned persons were reminded just once. In rare cases (6%) they had to be reminded twice. Figures 2.3b, 2.3c, 2.3d, 2.3e, 2.3f, 2.3g, 2.3h, 2.3i, 2.3j, 2.3k, 2.3l explain after sales services across all the states.

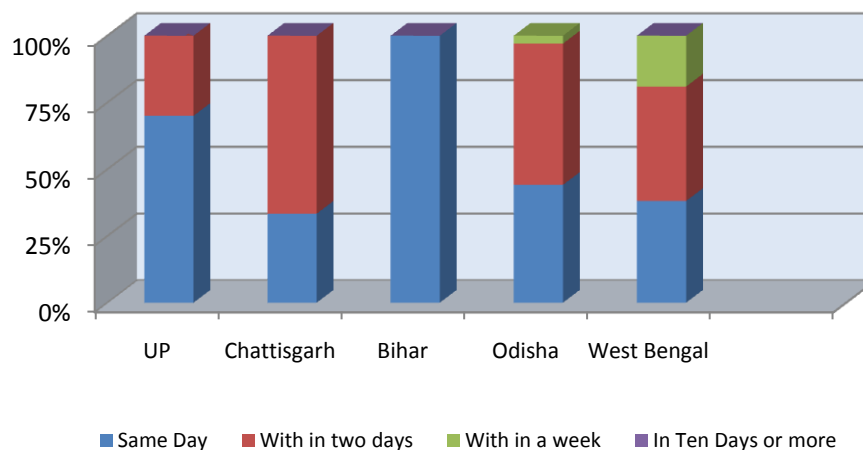
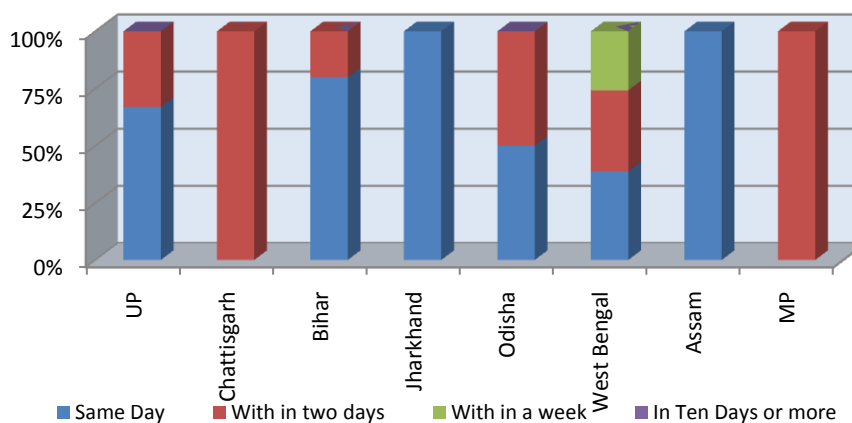
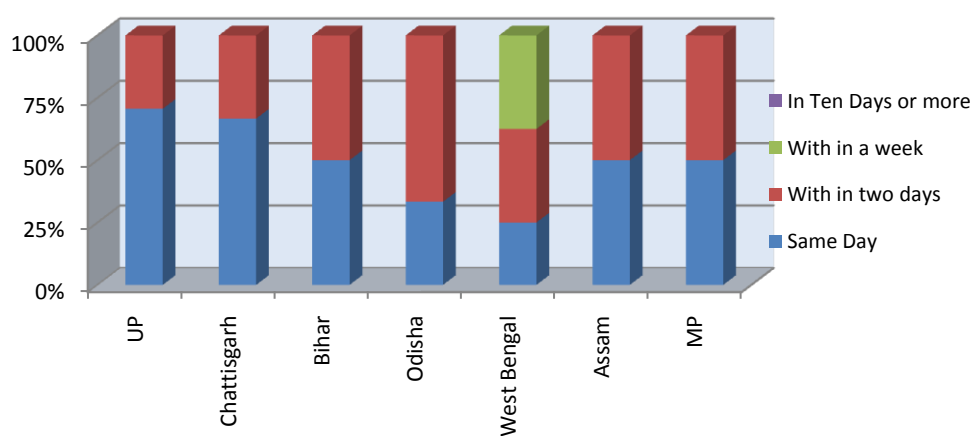
Figure 2.3b: Resolving Post Installation Problems in TP (2007-08)**Figure 2.3c: Resolving Post Installation Problems in TP (2008-09)****Figure 2.3d: Resolving Post Installation Problems in TP (2009-10)**

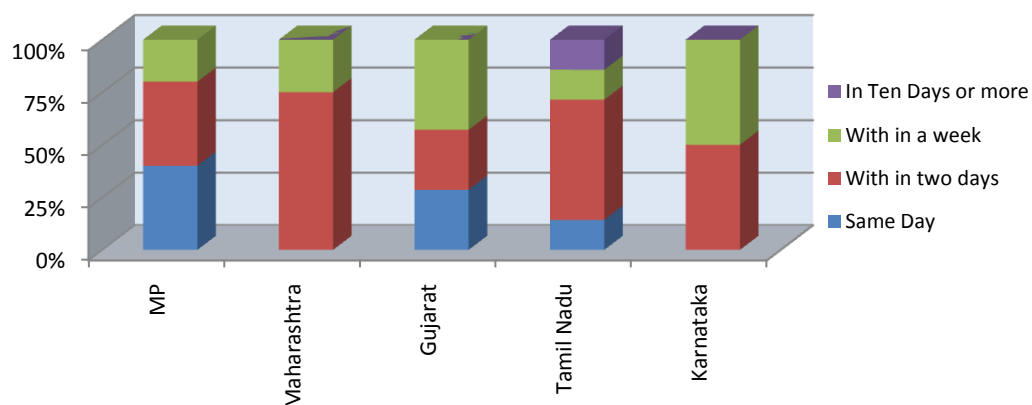
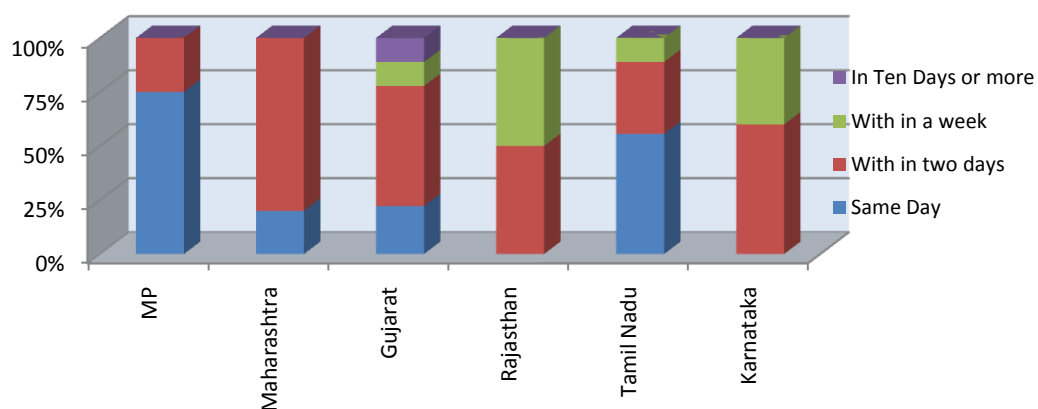
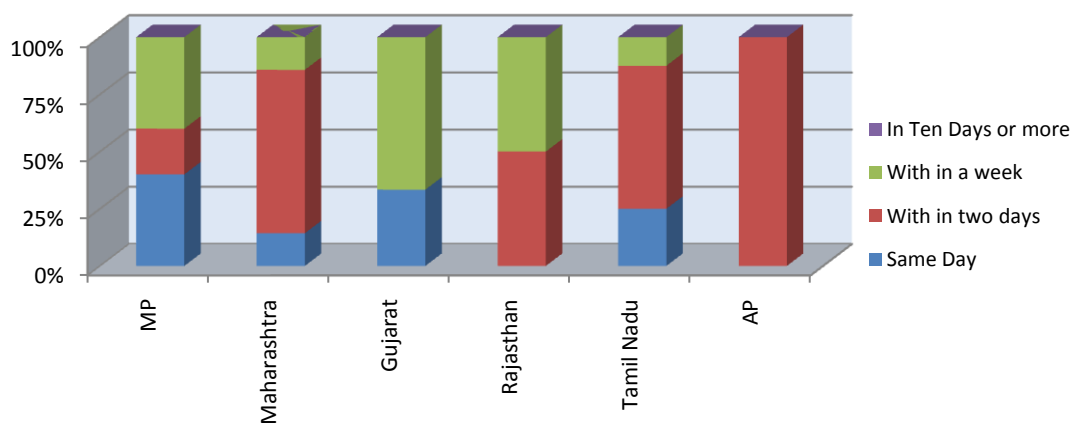
Figure 2.3e: Resolving Post Installation Problems in Drip Systems (2007-08)**Figure 2.3f: Resolving Post Installation Problems in Drip Systems (2008-09)****Figure 2.3g: Resolving Post Installation Problems in Drip Systems (2009-10)**

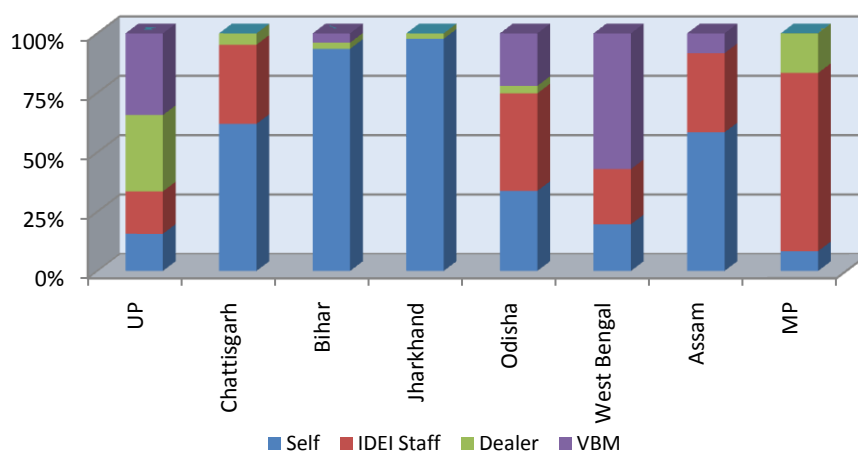
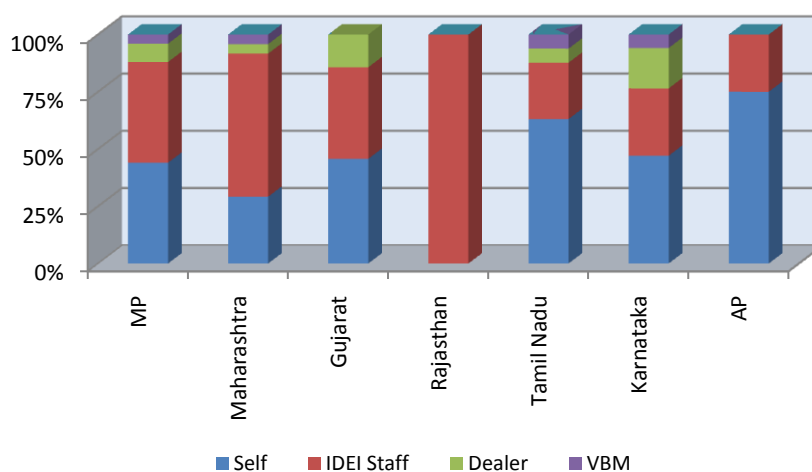
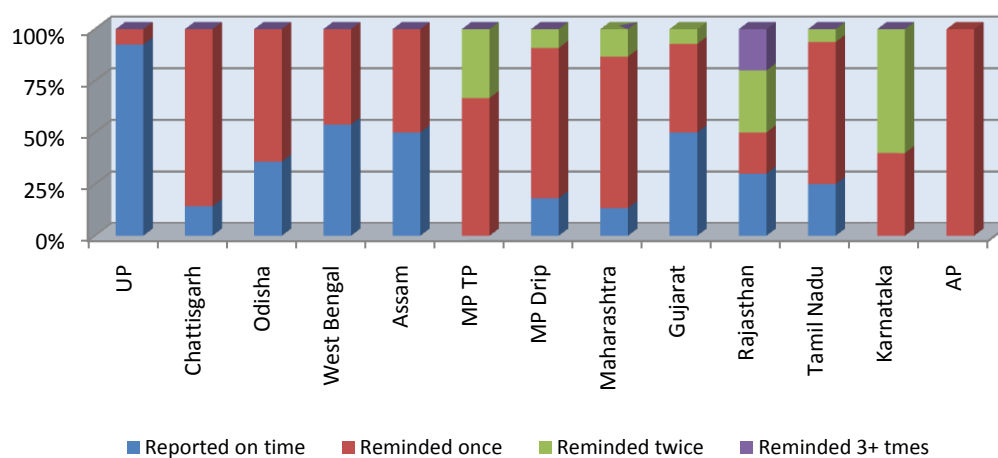
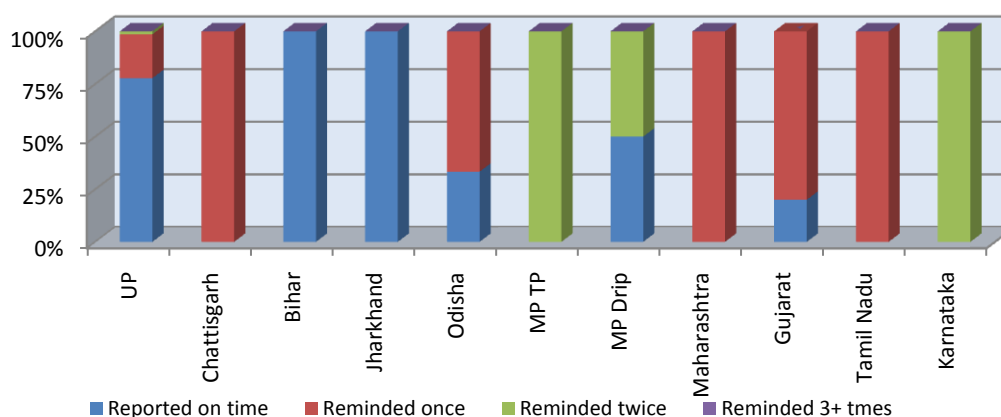
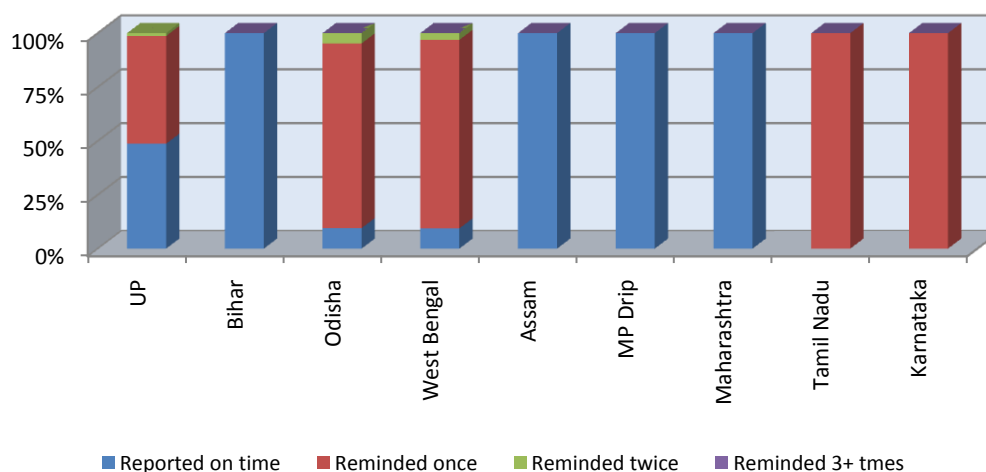
Figure 2.3h: Facilitating Agent for Resolving Post Installation Problems**Figure 2.3i: Facilitating Agent for Resolving Post Installation****Figure 2.3j: Reporting by IDEI Staff for Solving Post Installation Problems**

Figure 2.3k: Reporting by Dealers for Solving Post Installation Problems**Figure 2.3l: Reporting by VBM for Solving Post Installation Problems**

All the respondents (99.8%) were positive about the after sales services. There was a single case of dissatisfaction reported by a respondent using Drip Systems in MP. They were satisfied with the prompt services. 95% of the respondents using TP and 66% of those using Drip Systems rated the services as excellent or very good. Figures 2.3m, 2.3n and 2.3o show the response of the respondents across different states.

Figure 2.3m: Respondents' Satisfaction with After Sales Services (TP Areas)

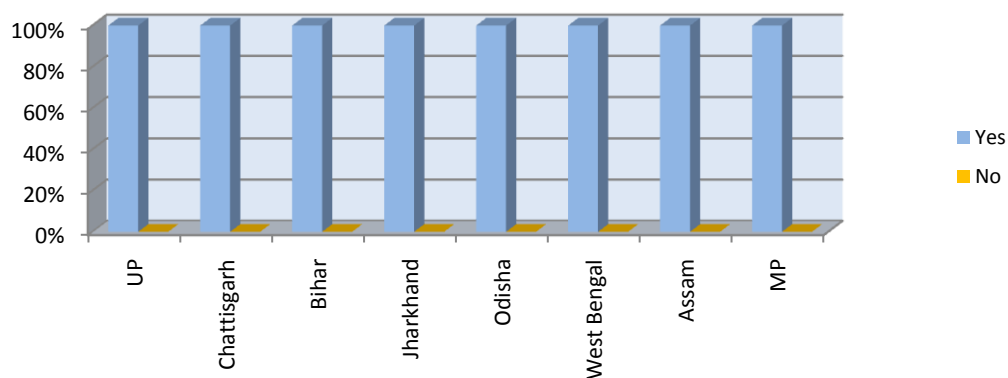


Figure 2.3n: Respondents' Satisfaction with After Sales Services (Drip Areas)

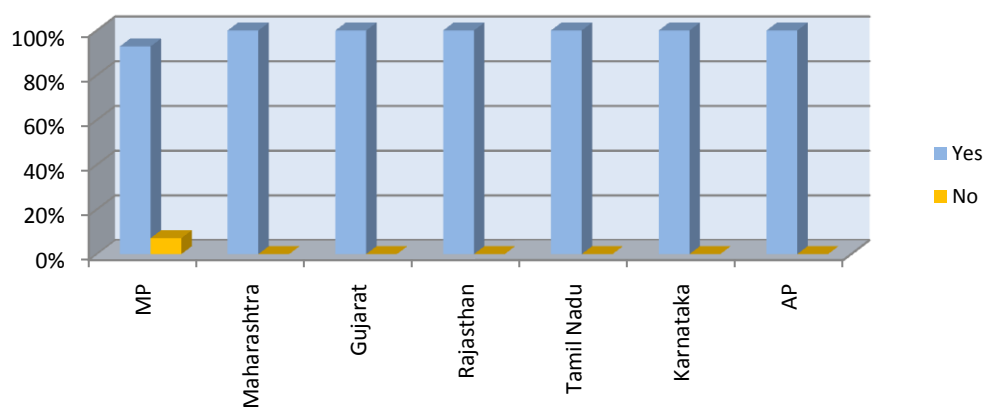
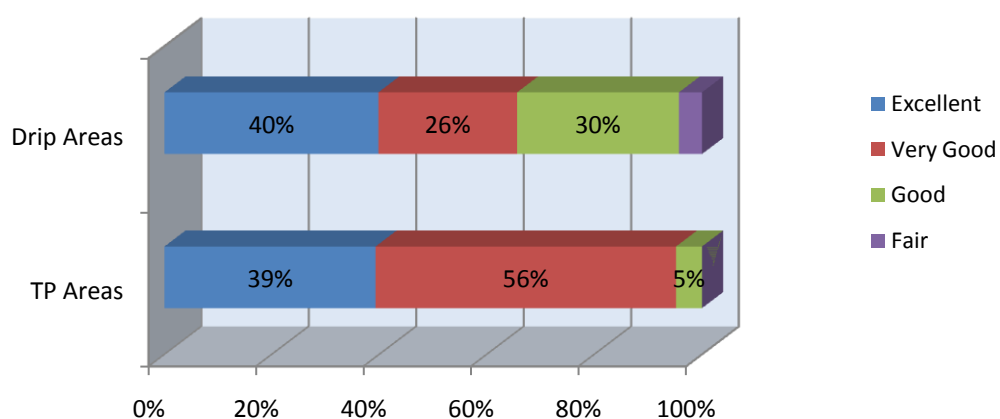


Figure 2.3o: Respondents' Satisfaction Level With After Sales Services



2.4 Overall Satisfaction with KB Products & Services

An attempt was also made to understand respondents' perception on some critical parameters like usefulness of the product, accessibility to KB products and services, and the services provided. All the respondents found the product to be useful and **99.9% were of the opinion that the products should be recommended. 99.98% reported that they had proper access to the products and services.** (Figures 2.4a & 2.4b)

Figure 2.4a: Overall Satisfaction with KB Technology and Services

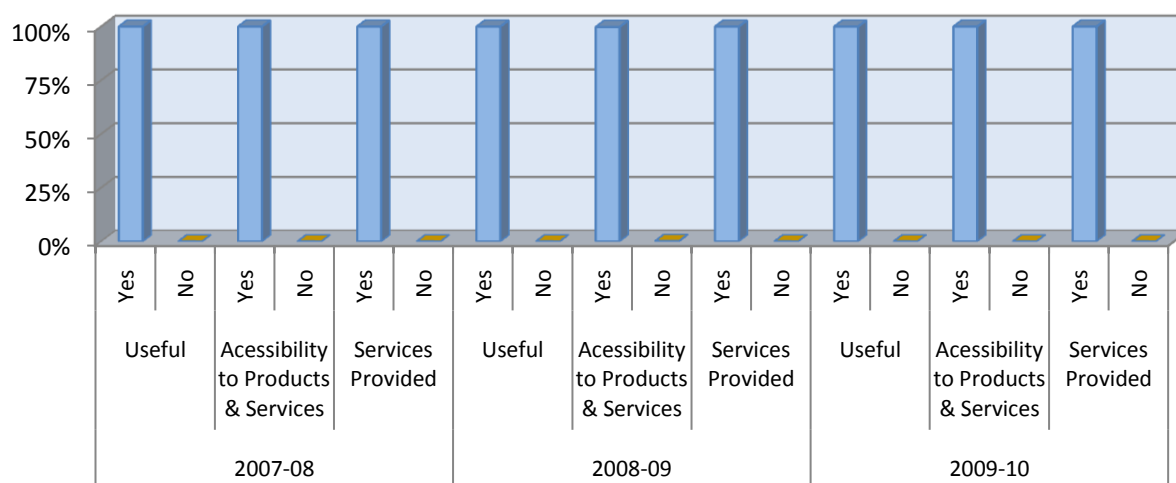
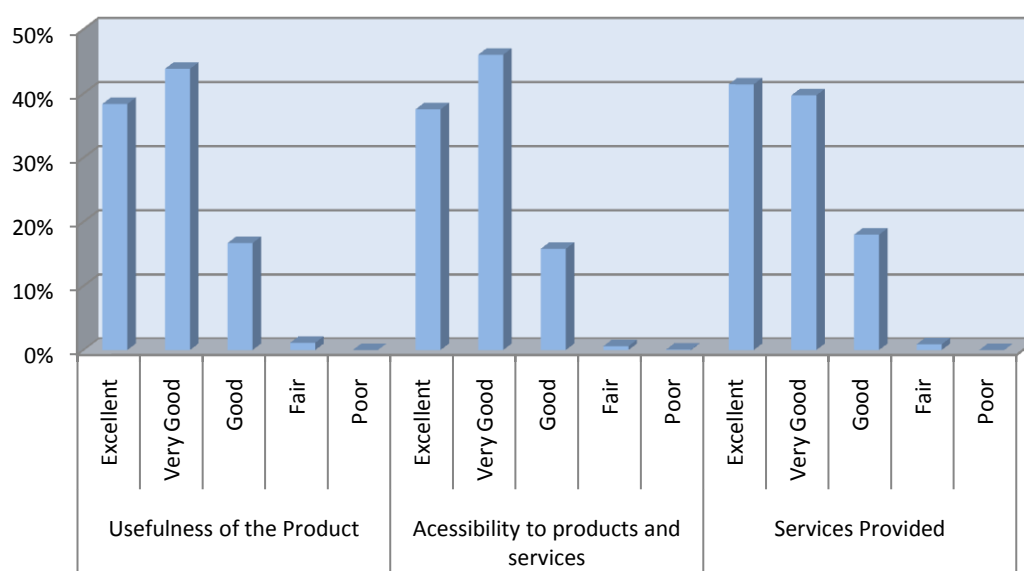


Figure 2.4b: Respondents' Satisfaction Level with Products & Services



Conclusion

The sample surveyed is representative of the users of KB technologies. Hence the present study reflects the opinion of the smallholder farmers about KB products and the services provided. Most of the users have benefitted through use of KB products and rated it as very useful. Apart from usefulness; factors such as assistance during installation, service after sales are integral to the acceptance of a product. Thus, IDEI staffs, dealers and VBMs play a critical role in the success of KB Products.