
“COMPARATIVE STUDY OF BENEFICIARIES SATISFACTION LEVEL UNDER IDDP BETWEEN BANASKANTHA AND VADODARA TRIBAL DISTRICTS OF GUJARAT”

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Abstract: Integrated dairy development projects [IDDPs] have been initiated by Tribal Development Department, Government of Gujarat, to provide assistance to below poverty line tribal families to enable them to enhance their level of income on a sustainable basis. Present study is an empirical study and based on secondary data drawn from project on "Concurrent evaluation and monitoring of Integrated Dairy Development Project in Gujarat". This study analyses information about beneficiary satisfaction level, veterinary services provided by the dairy, preferences to cattle selection and beneficiary training program. This study covers two tribal districts Banaskantha and Vadodara. It is from 12 Villages from 2 Taluka of Banaskantha districts and 42 Villages from 5 Taluka of Vadodara and Narmada districts. Three types of training programmes have been designed for the beneficiaries of IDDP, namely, orientation programme, scientific milk production training and refreshment training for animal management.

However, the first phase of orientation training was given to the beneficiaries when the cattle distribution process was over. In Banaskantha and Vadodara, respectively, 57 and 72 percent of the beneficiaries took part in the training. Majority of the beneficiaries in Banaskantha and Vadodara almost all beneficiaries availed veterinary services provided by the dairy. Mainly, health, vaccination and artificial insemination camps were held by the dairies. Doorstep services are also provided. Established network and regular services of dairies seemed to have contributed to this process. We also observed a sharp decline in satisfaction level of beneficiaries after six months of purchase. In Banaskantha, it reduced from 92 to 52 percent and in Vadodara, it reduced from 91 to 81 percent. The major reasons for their dissatisfaction were gradual decline in milk yield, discontinuation of milk yield and sickness of animal.

Introduction: As a result of the success of Green Revolution campaign in the seventies, the subsequent focus of development planners shifted to linking it with anti-poverty efforts. This strategy emphasized using land as the key asset base and developing further intervention around it. Animal husbandry, especially dairying activity was used as a peripheral option to marginally increase the farm income. As a result, while considerable efforts were made in improving the agriculture related income (including the opportunities for wage employment); dairying remained a part time activity only, based on one or two cattle units.

a. The dairy cooperatives in Gujarat, while very successful in dairying activities, have focused on the best geographical areas and capable families. They have to be motivated to consider the poor in remote locations as a viable business model;

b. Any major increase in the milk collection will also require creation of an expensive milk collection and processing infrastructure like strengthening of roads for milk vans,

arrangements of green fodder, chilling centers, veterinary services, etc.

c. There is a strong move for upgrading the quality of Indian milk to CODEX standards. The quality of milk will have to conform to be constantly upgraded standards. This will mean further investment in improving the quality of milk and reducing the bacteria content by ensuring clean & hygienic conditions, clean water for cattle, improved milking procedures, better cans, etc

OBJECTIVES

To improve the quality of life of identified BPL families by providing assured self-managed income generating activities through dairying.

By considering above objectives of IDDP study covers following points:

- To examine participation of beneficiaries in training program
- To study veterinary services provided by the dairy
- To examine the satisfaction of beneficiaries at the time of purchasing cattle
- To observe the beneficiaries preferences regarding cattle selection.

Review Of Literature

• **Dhanabalan. M. (2009)** opined that dairy has an important role in improving the overall economic conditions of rural India. To maintain the ecological balance, there is need for sustainable and balanced development of agriculture and allied sectors. From our first plan onwards, planners have given priority to allied sector for the economic development of the rural sector. Dairy farming is described as a small industry which provides gainful employment opportunities. It comprises of about six per cent of the national income.

Mandeep Singh and Joshi.A.S. (2008) reported the economic analysis of dairy farming has been reported for marginal and small farmers in Punjab for the year 2003-04. It has been found that a majority of the farm households are not able to meet their requirements from their income from crops. Further dairy farming has emerged as a major allied enterprise for supplementing the income of marginal and small farmers in Punjab. Income from off-farm sources has been identified another important factor contributing significantly to the disposable income of these farm households. The study has suggested to further exploiting the potential of off-farm sources towards meeting the domestic expenditure. Also, the technical efficiency of crops and dairy farming should be improved to provide more income to farmers.

SCOPE OF THE STUDY

- TRAINING

- VETERINARY SERVICES
- BENEFICIARIES' SATISFACTION LEVEL

RESEARCH METHODOLOGY

Methodology: Present study is an empirical study and based on secondary data drawn from project on "Concurrent evaluation and monitoring of Integrated Dairy Development Project in Gujarat". This study analyses information about beneficiary satisfaction level, veterinary services provided by the dairy, preferences to cattle selection and beneficiary training program. This study covers two tribal districts Banaskantha and Vadodara. It is from 12 villages from 2 Talukas of Banaskantha districts and 42 Villages from 5 Talukas of Vadodara and Narmada districts.

Analysis & Interpretation:

To shape this research study, t-Test for comparing beneficiaries satisfaction level of the two districts Two-Sample Assuming Unequal Variances have been used. The study can help us in understanding the equal satisfaction level of both the districts or not.

Findings and Conclusion

To improve the quality of life of identified BPL families by providing assured self-managed income generating activities through dairying. We observed that the beneficiaries training play a very important role, satisfaction at the time of purchase cattle and preferences for cattle selection and they have highly satisfaction in the above three objectives, rather there is significant difference in the veterinary services in both the districts.

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Appendix

All the calculative tables are included in Appendixes.

Participation of Beneficiaries in Training Programmes up to December 2007

| Sr. No. | Village | HH Surveyed | Beneficiary Attended training | | Beneficiary Not Attend Training | | No Response | |
|---------|--------------------|-------------|-------------------------------|----|---------------------------------|-----|-------------|----|
| | | No | No. | % | No. | % | No. | % |
| 1 | Boradiyala | 27 | 19 | 70 | 8 | 30 | | 0 |
| 2 | Kuvarshi | 35 | 24 | 69 | 11 | 31 | | 0 |
| 3 | Mota Pipodra | 4 | | 0 | 4 | 100 | | 0 |
| 4 | Gadhada | 14 | 9 | 64 | 5 | 36 | | 0 |
| 5 | Kharijamba | 17 | 7 | 41 | 7 | 41 | 3 | 18 |
| 6 | Ramgagh (Juniroh) | 9 | 6 | 67 | 3 | 33 | | 0 |
| 7 | Rampur(vadala) | 6 | 4 | 67 | 2 | 33 | | 0 |
| 8 | Kidotar | 8 | | 0 | 7 | 88 | 1 | 13 |
| 9 | Dhanpura sarotar | 7 | 3 | 43 | 4 | 57 | | 0 |
| 10 | Rabariya | 8 | 3 | 38 | 5 | 63 | | 0 |
| 11 | Uplo-Nichalo bandh | 10 | 5 | 50 | 5 | 50 | | 0 |
| 12 | Deri-Iq | 10 | 9 | 90 | 1 | 10 | | 0 |
| | Total | 155 | 89 | 57 | 62 | 40 | 4 | 3 |

Source: ACT Survey, March 2008

Participation of Beneficiaries in Training Programmes Conducted by Baroda Dairy

| Taluka | District | Surveyed villages | Total Beneficiaries | Surveyed Beneficiaries | Beneficiary Attended Training | | Beneficiary Not Attended Training | | No Response | |
|---------------|----------|-------------------|---------------------|------------------------|-------------------------------|-------|-----------------------------------|-------|-------------|-------|
| | | | | | No | % | No | % | No | % |
| Kawant | Vadodara | 17 | 569 | 84 | 56 | 66.67 | 22 | 26.19 | 6 | 7.14 |
| Chhota Udepur | | 4 | 41 | 13 | 8 | 61.54 | 5 | 38.46 | 0 | 0.00 |
| Naswadi | | 11 | 115 | 39 | 27 | 69.23 | 11 | 28.21 | 1 | 2.56 |
| Pavi Jetpur | | 3 | 22 | 9 | 2 | 22.22 | 6 | 66.67 | 1 | 11.11 |
| Tilakwada | Narmada | 7 | 146 | 41 | 40 | 97.56 | 1 | 2.44 | 0 | 0.00 |
| Total | | 42 | 893 | 186 | 133 | 71.51 | 45 | 24.19 | 8 | 4.30 |

Source: ACT Survey, 2008

Null Hypothesis: There is no significance difference in the participation of beneficiaries in training program in Banaskantha and Vadodara districts.

T-Test: Two-Sample Assuming Unequal Variances

| | Variable 1 | Variable 2 | | Variable 1 | Variable 2 |
|------------------------------|-------------|------------|---------------------|--------------|------------|
| Mean | 49.91666667 | 63.444 | t Stat | -4.853494232 | |
| Variance | 764.4469697 | 727.70743 | P(T<=t) one-tail | 0.00063311 | |
| Observations | 12 | 5 | t Critical one-tail | 1.859548038 | |
| Hypothesized Mean Difference | 56.68 | | P(T<=t) two-tail | 0.00126622 | |
| Df | 8 | | t Critical two-tail | 2.306004135 | |

INTERPRETATION

As the t- calculated value is less than the tabular value, so there is no significance difference in the participation of beneficiaries in training program in both the districts.

Veterinary Services Provided by the Dairy and the State Government

| Sr. No. | Village | HH Surveyed | Benefited Families | | Type of Services availed | | | |
|---------|--------------|-------------|--------------------|-------|--------------------------|-------------------|--------------|--------------|
| | | | No. | % | Veterinary Centre | Doorstep Services | | Through Camp |
| | | | | | | Complain Base | In Emergency | |
| 1 | Boradiyala | 27 | 26 | 96.30 | Yes | 16 | 10 | |
| 2 | Kuvarshi | 35 | 28 | 80.00 | Yes | 21 | 5 | 2 |
| 3 | Mota Pipodra | 4 | 1 | 25.00 | No | 1 | | |
| 4 | Gadhada | 14 | 11 | 78.57 | No | 11 | | |
| 5 | Kharijamba | 17 | 11 | 64.71 | No | 8 | 3 | |

| | | | | | | | | |
|--------------|------------------|------------|------------|--------------|-----|-----------|-----------|----------|
| 6 | Ramgagh (J) | 9 | 6 | 66.67 | No | 5 | 1 | |
| 7 | Rampur (V) | 6 | 2 | 33.33 | Yes | 2 | | |
| 8 | Kidotar | 8 | 7 | 87.50 | No | 7 | | |
| 9 | Dhanpura sarotar | 7 | 4 | 57.14 | No | 4 | | |
| 10 | Rabariya | 8 | 7 | 87.50 | No | 7 | | |
| 11 | U/Nbandh | 10 | 8 | 80.00 | No | 7 | 1 | |
| 12 | Deri-Iq | 10 | 10 | 100.00 | No | 10 | | |
| Total | | 155 | 121 | 78.06 | | 99 | 20 | 2 |

Source: ACT HH Survey, March 2008

Families Benefited by Dairy Veterinary Services

| Taluka | District | Surv eyed villa ges | Total Bene fici ar ies | Survey ed Benefi ciar ies | Families Benefited by Dairy Veterinary Service | | | | | |
|---------------|----------|---------------------|------------------------|---------------------------|------------------------------------------------|--------------|----------|-------------|-------------|-------------|
| | | | | | Yes | % | No | % | No Response | % |
| Kawant | Vadodara | 17 | 569 | 84 | 81 | 96.423 | 1 | 1.19 | 2 | 2.38 |
| Chhota Udepur | | 4 | 41 | 13 | 13 | 100 | | | | |
| Naswadi | | 11 | 115 | 39 | 38 | 97.44 | | | 1 | 2.56 |
| Pavi Jetpur | | 3 | 22 | 9 | 9 | 100 | | | | |
| Tilakwada | Narmada | 7 | 146 | 41 | 41 | 100 | | | | |
| Total | | 42 | 893 | 186 | 182 | 97.85 | 1 | 0.54 | 3 | 1.61 |

Source: ACT Survey, 2008

Null Hypothesis: There is no significance difference in the veterinary services provided by the dairy in both the districts.

T-Test: Two-Sample Assuming Unequal Variances

| | Variable 1 | Variable 2 | | Variable 1 | Variable 2 |
|------------------------------|-------------|------------|---------------------|--------------|------------|
| Mean | 71.39333333 | 98.7726 | t Stat | -16.53435531 | |
| Variance | 548.0436242 | 2.9539938 | P(T<=t) one-tail | 2.03592E-09 | |
| Observations | 12 | 5 | t Critical one-tail | 1.795884819 | |
| Hypothesized Mean Difference | 85.08 | | P(T<=t) two-tail | 4.07184E-09 | |
| Df | 11 | | t Critical two-tail | 2.20098516 | |

INTERPRETATION

As the t- calculated value is greater than the tabular value, so there is significance difference in the veterinary services provided by the dairy in both the districts.

Satisfaction of Beneficiaries at the Time of Purchase and After Six Month

| Sr. No. | Village | Households surveyed | Satisfaction at the time of purchase | | Satisfaction after six months | |
|---------|------------|---------------------|--------------------------------------|----|-------------------------------|----|
| | | | No. | o/ | No. | % |
| 1 | Boradiyala | 27 | 26 | 96 | 8 | 30 |

| | | | | | | |
|----|--------------------|-----|-----|-----|----|----|
| 2 | Kuvarshi | 35 | 33 | 94 | 14 | 40 |
| 3 | Mota Pipodra | 4 | 3 | 75 | 1 | 25 |
| 4 | Gadhada | 14 | 12 | 86 | 12 | 86 |
| 5 | Kharijamba | 17 | 15 | 88 | 8 | 47 |
| 6 | Ramgagh (Juniroh) | 9 | 6 | 67 | 4 | 44 |
| 7 | Rampur (Vadala) | 6 | 6 | 100 | 4 | 67 |
| 8 | Kidotar | 8 | 8 | 100 | 7 | 88 |
| 9 | Dhanpura sarotar | 7 | 6 | 86 | 4 | 57 |
| 10 | Rabariya | 8 | 7 | 88 | 6 | 75 |
| 11 | Uplo-Nichalo bandh | 10 | 10 | 100 | 4 | 40 |
| 12 | Deri-Iq | 10 | 10 | 100 | 9 | 90 |
| | Total | 155 | 142 | 92 | 81 | 52 |

Satisfaction of Beneficiaries at the Time of Purchase

| Taluka | District | Surve yed Villag es | Total Beneficia ries | Surve yed Benef iciari es | Satisfaction | | | |
|---------------|----------|------------------------------|----------------------------|---------------------------------------|----------------------------|-------|--------------------------|-------|
| | | | | | At purcha se Time | % | At Surve y Time | % |
| Kawant | Vadodara | 17 | 569 | 84 | 74 | 88.10 | 65 | 77.38 |
| Chhota Udepur | | 4 | 41 | 13 | 11 | 84.62 | 8 | 61.54 |
| Naswadi | | 11 | 115 | 39 | 37 | 94.87 | 34 | 87.18 |
| Pavi Jetpur | | 3 | 22 | 9 | 7 | 77.78 | 3 | 33.33 |
| Tilakwada | Narmada | 7 | 146 | 41 | 41 | 100 | 40 | 97.56 |
| Total | | 42 | 893 | 186 | 170 | 91.40 | 150 | 80.65 |

Source: ACT Survey, 2008

Null Hypothesis: There is no significance difference in the satisfaction of beneficiaries at the time of purchasing cattle in both the districts.

T-Test: Two-Sample Assuming Unequal Variances

| | Variable 1 | Variable 2 | | Variable 1 | Variable 2 |
|-----------------------|-------------|------------|------------------------|--------------|------------|
| Mean | 90 | 89.074 | t Stat | -17.90029533 | |
| Variance | 113.2727273 | 75.32808 | P(T<=t) one-tail | 1.20469E-08 | |
| Observations | 12 | 5 | t Critical one-tail | 1.833112933 | |
| Hypothesized Mean Dif | 89.537 | | P(T<=t) two-tail | 2.40938E-08 | |
| df | 9 | | t Critical two-tail | 2.262157163 | |

INTERPRETATION

As the t- calculated value is less than the tabular value, so there is no significance difference in the satisfaction of beneficiaries at the time of purchasing cattle in both the districts.

Beneficiaries' Preferences Regarding Cattle Selection

| Sr. No. | Village Name | Households surveyed | Preference for Animal Selection Method | | | | | |
|---------|--------------------|---------------------|----------------------------------------|-----------|-----------|-----------|----------|----------|
| | | | Through Camp | % | Himself | % | No reply | % |
| 1 | Boradiyala | 27 | 13 | 48 | 13 | 48 | 1 | 4 |
| 2 | Kuvarshi | 35 | 17 | 49 | 18 | 51 | | |
| 3 | Mota Pipodra | 4 | 4 | 100 | | 0 | | |
| 4 | Gadhada | 14 | 5 | 36 | 9 | 64 | | |
| 5 | Kharijamba | 17 | 7 | 41 | 9 | 53 | 1 | 6 |
| 6 | Ramgagh (Juniroh) | 9 | 3 | 33 | 6 | 67 | | |
| 7 | Rampur(vadala) | 6 | 2 | 33 | 4 | 67 | | |
| 8 | Kidotar | 8 | 1 | 13 | 7 | 88 | | |
| 9 | Dhanpura sarotar | 7 | | 0 | 7 | 100 | | |
| 10 | Rabariya | 8 | 1 | 13 | 7 | 88 | | |
| 11 | Uplo-Nichalo bandh | 10 | 1 | 10 | 8 | 80 | 1 | 10 |
| 12 | Deri-Iq | 10 | 3 | 30 | 7 | 70 | | |
| | Total | 155 | 57 | 37 | 95 | 61 | 3 | 2 |

Beneficiaries' Preferences for Cattle selection

| Taluka | District | Surveyed Villages | Total Beneficiaries | Surveyed Beneficiaries | Preference for Animal Selection Method | | | | | | | |
|---------------|----------|-------------------|---------------------|------------------------|----------------------------------------|-------|------------|-------|-----------------------|-------|--------------|-------|
| | | | | | Camp | % | Personally | % | From Particular Place | % | No Responses | % |
| Kawant | Vadodara | 17 | 569 | 84 | 8 | 9.52 | 65 | 77.38 | 3 | 3.57 | 8 | 9.52 |
| Chhota Udepur | | 4 | 41 | 13 | 5 | 38.46 | 4 | 30.77 | 3 | 23.08 | 1 | 7.69 |
| Naswadi | | 11 | 115 | 39 | 18 | 46.15 | 17 | 43.59 | 2 | 5.13 | 2 | 5.13 |
| Pavi Jetpur | | 3 | 22 | 9 | 3 | 33.33 | 3 | 33.33 | 1 | 11.11 | 2 | 22.22 |
| Tilakwada | Narmada | 7 | 146 | 41 | 18 | 43.9 | 21 | 51.22 | | 0 | 2 | 4.88 |
| Total | | 42 | 893 | 186 | 52 | 27.96 | 110 | 59.14 | 9 | 4.84 | 15 | 8.06 |

Source: ACT Survey, 2008

Null Hypothesis: There is no significance difference in the beneficiaries' preferences regarding cattle selection through Camp and Personally Selection in both the districts.

T-Test: Two-Sample Assuming Unequal Variances
Cattle selection through Camp

| | | |
|--|------------|------------|
| | Variable 1 | Variable 2 |
|--|------------|------------|

| | | |
|-----------------------|-------------|-----------|
| Mean | 33.83333333 | 34.272 |
| Variance | 678.3333333 | 216.21837 |
| Observations | 12 | 5 |
| Hypothesized Mean Dif | 34.051 | |
| df | 13 | |
| t Stat | -3.4529147 | |
| P(T<=t) one-tail | 0.002142041 | |
| t Critical one-tail | 1.770933396 | |
| P(T<=t) two-tail | 0.004284083 | |
| t Critical two-tail | 2.160368656 | |

| Cattle selection personally | | |
|-----------------------------|------------|------------|
| | Variable 1 | Variable 2 |
| Mean | 64.6666666 | 47.258 |
| Variance | 672.24242 | 350.582 |
| Observations | 12 | 5 |
| Hypothesized Mean Dif | 55.964 | |
| df | 11 | |
| t Stat | -3.4329204 | |
| P(T<=t) one-tail | 0.0027970 | |
| t Critical one-tail | 1.7958848 | |
| P(T<=t) two-tail | 0.0055941 | |
| t Critical two-tail | 2.2009851 | |

INTERPRETATION :As the t- calculated value is less than the tabular values in both above table, so there is no significance difference in the beneficiaries' preferences regarding cattle selection through Camp and Personally Selection in both the districts.

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