ADOPTION OF NDRI DAHI CULTURE AMONG DAIRY WOMEN-AN EXPERIMENT

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The demand for milk and milk products in India is increasing rapidly because of population growth, rising income and increasing urbanization. It also increases due to the requirement of growing children, expectant mother, and a large proportion of vegetarian population in the country. Even if we take a minimum of 10 gram of animal protein and presume that all of it is through milk and milk products (Kanbe 1992). Now, majority of farm families having excessive milk production and they required it to preserve and preparation of milk products.

Dahi is a traditional milk product of India and it consumes all the families as a refreshing and palatable. Dahi is essaying to digest and it has been certain beneficial properties (Fernandes et al., 1990). NDRI, Karnal has launched a scientifically good quality of dahi culture and is successfully used in the dairy industry. No attempt has been made to introduce these cultures in the household level. This technology now needs to be tested at household level. Present study was conducted with an objective to evaluate the adoption of NDRI dahi culture among farm families.

METHODOLOGY

The study was conducted in Yamunanagar district of Haryana. A multistage random sampling technique was applied for selection of blocks, villages and respondents. Three blocks headquarters and three villages have been selected randomly. Eighteen respondents from each block/village, three from each categories i.e., landless, marginal, small, medium and large land holding

were selected randomly. Thus the total number of respondents was 90 (45 from urban i.e., block headquarters and 45 from village i.e., rural). The selected respondents of the study were women, who converted milk into dahi at least one lit/day in urban and who possess at least one milch cattle or buffalo from rural areas.

The items in the adoption index were having multiple choices (answer). Hence, a score 3 was awarded to each correct answer and zero to the wrong answer. Thus the maximum obtainable score of adoption index was 30 whereas, minimum could be zero.

RESULTS AND DISCUSSION

Distribution of Dairywomen on The Basis of Adoption Level of NDRI Dahi Culture Practices-Table 1. reveals that in case of urban areas, the majority of the respondents (77.7%) have been in medium adoption category, whereas 11.1 percent have been appeared in high and low adoption categories. Thus, it indicates that maximum percent of respondents belonged to medium level of adoption about NDRI dahi culture practices. In case of rural area, maximum dairywomen (77.7%) were having medium level of adoption followed by 15.5 percent and 6.6 percent dairy women were having high and low level of adoption, respectively. In relation to pooled, it was found that the majority of the dairy women (77.8%) had medium level of adoption. Among them 13.3 percent fall in high category and followed by 8.8 percent low level of adoption, respectively. About 90 percent of respondents had low to medium level

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of adoption of NDRI dahi culture practice. These findings are similar to Meena 1997, Roy 1998 and Promila 1994.

Table 1. Distribution of Dairywomen in Different Categories According to Their Level of Adoption Regarding NDRI Dahi Culture Practices

| Respondents | Categories | Frequencies | Percent |
|-------------|---------------|-------------|---------|
| Urban | Low (<7) | 5 | 11.1 |
| 0,04 | Medium (7-13) | 35 | 77.7 |
| | High(>13) | 5 | 11.1 |
| Rural | Low (<7) | 3 | 6.6 |
| , 1 | Medium (7-13) | 35 | 77.7 |
| | High (>13) | 7 | 15.5 |
| Pooled | Low (<7) | 8 | 8.8 |
| | Medium (7-13) | 70 | 77.8 |
| | High (>13) | 12 | 13.3 |

Extent of Adoption of NDRI Dahi Culture Practices—The data in Table 2. highlighted the information about extent of adoption of NDRI dahi culture practices among dairywomen with respect

to ten important recommendations, that 62 percent for the respondents had adopted the place need to keep dahi culture, whereas extent of adoption regarding multiply culture for future use (52.3%) incubation temperature (42.7%) and adoption of NDRI dahi culture (36%). Whereas, poor extent of adoption was found in adopting the lid for cover of dahi, dose of dahi, vessel for dahi making, ves sel for milk, pre heating, time for dahi making and kind of dahi is made. Overall extent of adoption among the dairywomen was 32.82 percent in urban areas. In case of rural areas the extent of adoption among the dairywomen was found highest in case of storage of dahi culture (60%) followed by multiply culture for future use and required temperature to use culture were 53.3% and 44.3%, respectively. Whereas, poor extent of adoption in the practices, kind of dahi got by NDRI dahi culture was found 14.7 percent only.

Table 2. Extent of Adoption of Respondents About NDRI Dahi Culture Practices

| | | Urban | | Rural | | Pooled | |
|--------|---------------------------------|---------------|-------|---------------|-------|---------------|-------|
| SI.No. | Practices | Mean Score | % age | Mean Score | % age | Mean Score | % age |
| 1. | Which culture adopted | 1.08 | 36.0 | 0.97 | 32.3 | 1.03 | 34.3 |
| 2. | Dose of NDRI dahi culture | 0.77 | 25.7 | 0.77 | 25.7 | 0.77 | 25.7 |
| 3. | Incubation temperature | 1.28 | 42.7 | 1.33 | 44.3 | 1.31 | 43.7 |
| 4. | Time for dahi making | 0.55 | 18.3 | 0.68 | 22.7 | 0.62 | 20.7 |
| 5. | Place for culture store | 1.86 | 62.0 | 1.80 | 60.0 | 1.83 | 61.0 |
| 6. | Kind of dahi is made | 0.42 | 14.0 | 0.44 | 14.7 | 0.43 | 14.3 |
| 7. | Vessel for milk pre- heating | 0.66 | 22.0 | 0.91 | 30.3 | 0.76 | 26.0 |
| 8. | Vessel for dahi making | 1.57 | 52.3 | 1.60 | 53.3 | 1.58 | 52.6 |
| 9. | Multiply culture for future use | 0.71 | 23.6 | 1.00 | 33.3 | 0.85 | 28.3 |
| 10. | Lid for cover of dahi | 0.95 | 31.6 | 1.04 | 34.7 | 1.00 | 33.3 |
| 11. | Pooled | 9.85 | 32.82 | 10.54 | 38.13 | 10.20 | 34.06 |

The data were further analysed to find out the pooled extent of adoption in the study area in extent of adoption 61 percent was place for dahi culture whereas, the level of adoption in relation to other practices are as follows multiply culture for future use (52.6%), temperature for culture use (43.67%) NDRI culture use (34.3%), lid to cover dahi vessel (33.3%) vessel for dahi making (28.3%), vessel for milk pre heating (26%), and kind of dahi (14.3%). The overall extent of adoption of NDRI dahi culture practices was 34.06 percent. The low extent of adoption of NDRI dahi culture because it is very complex in nature, required specific

conditions and low knowledge of practices about NDRI dahi culture among dairywomen. NDRI dahi culture is not available easily at the farmer doorstep and they are habitual to use their own or traditional dahi culture for preparation of dahi at home. Other factors of low adoption are dairywomen are more hesitate to adopt any of the innovation particularly which innovation directly used in family members diet.

Relationship Between Selected Traits of Respondents and Extent of Adoption—The 'r' values of selected traits and adoption have been presented in Table 3. The table has been devoted

to describe relationship between traits of the dairywomen with their level of knowledge. The "r" values, which were presented in Table 3 indicated that herd size, milk converted into dahi and milk sale have positive relationship with the adoption level of dairy women regarding NDRI dahi culture practices as it were significant at 5 % level of probability. The operational land holding, total milk production and milk consumption at home of NDRI dahi culture was also highly related with women regarding adoption of NDRI dahi culture practices, as the 'r' value is significant at one percent level. The other variables have no relationship with dairywomen regarding adoption of NDRI dahi culture practices.

The 'r' value of knowledge with extent of adoption is 0.7704, which is significant at 1 percent level of probability. It indicates that the knowledge has strong relationship with extent of adoption. It is stated that adoption of any innovation is not possible without knowledge.

These relationship finding also similar to the finding of (Meena 1997; Sinha 1997; Chaudhari et al., 1988 and Pawar et al., 1983).

Table 3. Relationship Between Selected Traits of Respondents and Extent of Adoption (N=90)

| Res | 'r' values | |
|--------|---|---------------------|
| SI.No. | Traits | -0.2017 |
| 1. | Age | -0.0607 |
| 2. | Family size | -0.0561 |
| 3. | Education Family education status. | 0.0810 |
| 4. | Operational land holding | 0.3804** 0.2497* |
| 5. | Operational land | |
| 6. | Herd size | 0.4250** |
| 7. | Total milk production Milk consumption at home | 0.4492** |
| 8. | Milk sale Social participation Systems on contact | 0.3486* |
| 9. | | 0.2262* |
| 10. | | -0.0391 |
| 11. | | 0.1918 |
| 12. | | 0.0447 |
| 13. | Mass media exposure | 0.7704** |
| 14. | Knowledge Lef significance. | |

* Indicates at 5% level of significance.

** Indicate at 1 % level of significance

'r' value=0.205 at 5% and 0.267 at 1% level of significance

CONCLUSION

So it can be concluded that increase the adoption of NDRI dahi culture the extension agencies should geared up to educate the dairywomen though different extension methods and techniques such as, training, demonstration, field day, dairy melas, print media, audia- visual aids and dahi culture provide at the locale markets.

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