# Extent of Information Processing Behavior of Dryland Farmers

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## ABSTRACT

*In case of evaluation of information oftenly by evaluating farm experience was rank first. By discussion with friends, discussion with family members and discussion with progressive farmers were ranked second, third and fourth in case of oftenly evaluation of information. In case of occasionally evaluated information by discussion with extension officers was rank first and by taking demonstration on own field at second rank. In case of never evaluated information by discussion with agriculture officers was rank first. In case of oftenly information storage by memorizing, practicing the method and preserving printed material. Occasionally information stored by creating file/documents and writing in daily diary. Farmers never store the information by creating CD's and by capturing photographs. In case of often transformation of information by discussing the self-experience was rank first and by normal conversation rank second. Occasionally transformed the information by discussing in local meetings and conveying to local members at farm or at home. In case of never transformed the information by distributing preserved leaflet and by training / seminars.*

**Keywords:** *Information, Information processing behaviour, Dryland farmers.*

India has made pioneering efforts in evolving improved dry farming technologies and has advocated many improved dryland farming practices for the farmer. Despite all improvements in agriculture, we have yet not been able to evolve an appropriate package of practices for dryland areas. The income of farmers of dryland regions is still very low. To feed our one and half billion population that we will have by 2020 A.D., we will require food grains of 280 million tonnes approximately. For achieving this target we will have to harness every inch of our cultivable lands, especially dryland, with utmost care. It is therefore necessary to know information processing behaviour of dryland farmers. The study was conducted with the following specific objectives.

1.  To study the personal, socio-economic characteristics of dryland farmers.

2.  To know the information processing behavious of dryland farmers.

## METHDOLOGY

This study was conducted in Barshi and Mohol tehsils of Solapur district in Maharashtra state. From each tahsil five villages were selected randomly. Total 10 villages were selected purposively from Barshi and Mohol tahsil of Solapur district for the study, as both tahsils are having dryland condition. Total number of respondents from each village 15 farmers were selected by random sampling method. Thus, from 10 villages of both tahsils, 150 respondents were selected for the present study. The data were collected with help of pre-designed interview schedule by contacting dryland farmers personally. A statistical analysis was done using mean, standard deviation and percent frequency.

## RESULT AND DISCUSSION

The Table1 revealed that majority of respondents (48.00%) belonged to middle age group (36 to 50 years) and followed by 28.00 per cent respondents were young (up to 35 years) and 24.00 per cent respondents were under old age group (above 51 years). The 88.00 per cent of dryland farmers were literate. Out of 150 respondents, 38.00 per cent had completed their secondary education, (32.00%) respondents educated up to primary level, college level and higher secondary 10.00 per cent and 8.00 per cent respectively. It was found that majority of respondents (73.34%) belonged to medium size of family followed by small size (15.33 %) and large size of family (11.33 %) respectively. It is seen that (45.33%) respondents were from small size of land holding category, followed by the respondents having marginal size of land holding (30.00%), 16.00 per cent of respondents having medium size of land holding and 8.67 per cent of respondents having large size of land holding. It was also revealed that majority (61.33%) respondents had medium level of social participation, followed by low level of social participation (22.67 %) and 8.67 per cent high level of social participation. It is noteworthy that 7.33 per cent of respondents had no social participation at all. It was also observed that 61.33 per cent of the dryland farmers had medium annual income i.e. between Rs. 85,176/- to Rs. 2,08,455/- followed by 20.67 per cent of dryland farmers had annual income above Rs. 2,08,456 and 18.00 per cent of dryland farmers had income up to Rs. 85,175/-. Majority of (67.33%) respondents had only farming profession followed by 22.33 per cent of respondents had farming and subsidiary occupation and 10.00 per cent of respondents had farming and business or job as their main occupation. It was observed from Table 1 that majority (52.00 %) of respondents had medium level of motivation followed

by 38.00 per cent had low level of motivation and 10.00 per cent of the respondents had high level of motivation respectively. Majority (66.00 %) of dryland farmers had medium aspiration followed by low (28.67 %) aspiration and high (5.33 %) of aspiration respectively.

These observations are similar to findings of Hossain et al. (2011), Daya Ram et al., (2010) and Gawande (2008).

Extent of information processing behaviour of dryland farmers.

Thayer (1966) and Shinde (1997) conceptualized information processing as a composite of information evaluation, information storage and information transformation. In the present study the information processing behaviour of dryland farmers the results are presented and discussed below:

### Table 1
### Personal, Socio-economic Characteristics of dryland farmers.

| Sr. No. | | Characteristics category | N=150 | Per cent |
|---|---|---|---|---|
| **1.** | | Age | | |
| | **i.** | Young     (up to 35 Years) | 42 | 28.00 |
| | **ii.** | Middle    (36 to 50 Years) | 72 | 48.00 |
| | **iii.** | Old        (Above 51 Years) | 36 | 24.00 |
| | | Total | 150 | 100 |
| **2.** | | Education | | |
| | **i.** | Illiterate | 18 | 12.00 |
| | **ii.** | Primary education       (up to 7$^{th}$ std) | 48 | 32.00 |
| | **iii.** | Secondary education   (8$^{th}$-10$^{th}$ std) | 57 | 38.00 |
| | **iv.** | Higher secondary edu. (11$^{th}$-12$^{th}$) | 12 | 08.00 |
| | **v.** | College (above 12$^{th}$) | 15 | 10.00 |
| | | Total | 150 | 100 |
| **3.** | | Size of Family | | |
| | **i.** | Small     (up to 5 members) | 23 | 15.33 |
| | **ii.** | Medium (6 to 8 members) | 110 | 73.34 |
| | **Iii.** | Big        (9 and above members) | 17 | 11.33 |
| | | Total | 150 | 100 |
| **4.** | | Land Holding | | |
| | **i.** | Marginal (up to 1.00 ha) | 45 | 30.00 |
| | **ii.** | Small       (1.01 to 2.00 ha) | 68 | 45.33 |
| | **iii.** | Medium   (2.01 to 4 ha) | 24 | 16.00 |
| | **iv.** | Large      (4.01ha and above) | 13 | 08.67 |
| | | Total | 150 | 100 |
| **5.** | | Social Participation | | |
| | **i.** | No Participation | 11 | 07.33 |
| | **ii.** | Low             (up to 1 score) | 34 | 22.67 |
| | **iii.** | Medium        (2-4 scores) | 92 | 61.33 |
| | **iv.** | High             (5 and above scores) | 13 | 08.67 |
| | | Total | 150 | 100 |
| **6.** | | Annual income | | |
| | **i.** | Low        (up to Rs.85,175/-) | 27 | 18.00 |
| | **ii.** | Medium   (Rs. 85,176/- to Rs. 2,08,455/-) | 92 | 61.33 |
| | **iii.** | High        (Rs. 2,08,456/- and above) | 31 | 20.67 |
| | | Total | 150 | 100 |
| **7.** | | Occupation | | |
| | **i.** | Only farming | 101 | 67.33 |
| | **ii.** | Farming + subsidiary | 34 | 22.67 |
| | **iii.** | Farming + business/job | 15 | 10.00 |
| | | Total | 150 | 100 |
| **8.** | | Motivation | | |
| | **i.** | Low        (up to 4 score) | 57 | 38.00 |
| | **ii.** | Medium (5-6 score) | 78 | 52.00 |
| | **iii.** | High       (7 and above ) | 15 | 10.00 |
| | | Total | 150 | 100 |
| **9.** | | Aspiration | | |
| | **i.** | Low       (up to 3 score) | 43 | 28.67 |
| | **ii.** | Medium (4-7 score) | 99 | 66.00 |
| | **iii.** | High       (8 and above ) | 08 | 05.33 |
| | | Total | 150 | 100 |

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**Table 2**
**Distribution of information processing behaviour of dryland farmers**

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| Sr. no. | Items | Information processing behaviour | | |
|---|---|---|---|---|
| | | **Often** | **Occasionally** | Never |
| **A)** | Information   evaluation | | | |
| **1.** | Discussion with family members | 118 (78.67) | 24 (16.00) | 8 (05.33) |
| **2.** | Discussion with friends | 128 (85.33) | 18 (12.00) | 4 (02.67) |
| **3.** | Discussion with progressive farmers | 90 (60.00) | 45 (30.00) | 15 (10.00) |
| **4.** | Discussion with extension officers | 38 (25.33) | 72 (48.00) | 40 (26.67) |
| **5.** | By taking demonstration on own field | 31 (20.67) | 60 (40.00) | 59 (39.33) |
| **6.** | By evaluating farm experience | 132 (88.00) | 15 (10.00) | 3 (02.00) |
| **7.** | Consultation with magazines / journals | 32 (21.00) | 50 (33.33) | 68 (45.33) |
| **8.** | Discussion with  agriculture officers | 16 (10.67) | 28 (18.67) | 106 (70.67) |
| **9.** | Others | 8 (05.33) | 14 (09.33) | 128 (85.33) |
| **B)** | **Information storage** | | | |
| 1. | Memorizing | 137 (91.33) | 11 (07.33) | 2 (1.33) |
| 2. | Preserving printed material | 62 (41.33) | 36 (24.00) | 52 (34.67) |
| 3. | Practicing the method | 99 (66.00) | 32 (21.33) | 19 (12.67) |
| 4. | Creating file/documents | 47 (31.33) | 61 (40.67) | 42 (28.00) |
| 5. | Writing in daily diary | 36 (24.00) | 58 (38.67) | 56 (37.33) |
| 6. | CD's | 14 (9.33) | 24 (16.00) | 112 (74.67) |
| 7. | Captured photographs | 24 (16.00) | 47 (31.33) | 79 (52.67) |
| 8. | Collecting available literature | 38 (25.33) | 48 (32.00) | 64 (42.67) |
| **C)** | **Information transformation** | | | |
| 1. | By normal conversations | 72 (48.00) | 48 (32.00) | 30 (20.00) |
| 2. | By training / seminars. | 21 (14.00) | 34 (22.67) | 95 (63.33) |
| 3. | By distributing preserved leaflet | 8 (05.33) | 27 (18.00) | 115 (76.67) |
| 4. | By demonstration | 25 (16.67) | 33 (22.00) | 92 (61.33) |
| 5. | Discussing in local meetings | 36 (24.00) | 86 (57.33) | 28 (18.67) |
| 6. | Conveying to local members at farm or at home. | 45 (30.00) | 67 (44.67) | 38 (25.33) |
| 7. | By collective reading of popular articles in newspapers. | 28 (18.67) | 65 (43.33) | 57 (38.00) |
| 8. | By discussing the self-experience | 95 (63.33) | 42 (28.00) | 13 (08.67) |

## A. Information evaluation

It is clear from Table2 that respondents had evaluated the information often by evaluating farm experience (88.00 %), by discussion with friends (85.33 %), discussion with family members (78.67 %) and discussion with progressive farmers (60.00 %).

Table 2 also showed that the respondents had evaluated the information occasionally by discussion with extension officers (48.00 %) and by taking demonstration on own field (40.00 %). The respondents were never evaluated information by discussion with agriculture officers (68.00 %) and consultation with magazines / journals (45.33 %).

The present finding substantiated the finding of Gaur Meena and Indira Bishnoi (2010) and Kolhe (2000)

## B. Information storage

It was clear from Table 2that respondents had often stored the information by memorizing (91.33 %), practicing the method (66.00 %) and preserving printed material (41.33 %).

It was also seen that the respondents had the information occasionally by creating file/documents (40.67 %) and writing in daily diary (38.67 %). The percentage of respondents who never stored information by CD's (74.67 %), captured photographs (52.67 %) and collecting available literature (42.67 %).

These findings support the finding of Bhaltilak (2004) and Alok Kumar et al. (2011)

## C. Information transformation

It was clear from Table 2 that respondents often transformed the information by discussing the self-experience (63.33 %) and by normal conversations (48.00 %). It also observed that the respondents who occasionally transformed the information by discussing in local meetings (57.33 %), conveying to local members at farm or at home (44.67 %) and by collective reading of popular articles in newspapers (43.33 %).

The respondents never transferred the information by distributing preserved leaflet (76.67 %), by training / seminars (63.33 %) and by demonstration (61.33 %).

The present findings are in line with the findings of Singh Manjeela et al., (2009) and Saha et al., (2011)

The distribution of dryland farmers according to their degree of information processing behaviour is presented in Table 3

### Table 3
### Distribution of dryland farmers according to information processing behaviour

| Sr. No. | Information processing behaviour | Respondents (N = 150) | |
|---|---|---|---|
| | | **Number** | **Per cent** |
| 1. | Low      (up to 27 score) | 32 | **21.33** |
| 2. | Medium (28 to 52 score) | 90 | **60.00** |
| 3. | High      (53 and above ) | 28 | **18.67** |
| | Total | 150 | **100.00** |

Mean = 39.7                                    S.D. = 12.67

It was observed from Table 3 that majority of respondents (60.00 %) were found to be in medium information processing category. About 21.33 per cent of the respondents were in low information processing category and 18.67 per cent of the respondents were in high information processing category.These findings lend support to the finding of Jahagirdar (2011).

## CONCLUSION

It can be concluded that dryland farmers were middle aged and educated. They had medium annual income, size of family and social participation, small size of land holding, farming as their main occupation, medium level of motivation and aspiration. It was concluded that majority of the dryland farmers had mainly evaluated the information by discussion with family members, by discussion with friends and discussion with progressive farmers. It was also concluded that majority of dryland farmers had mainly stored the information by memorizing, practicing the method and preserving printed material and transformed the information by discussing the self-experience and by normal conversations. Considering changing scenario printed material still can be used for sharing experiences and discussing agriculture innovations.

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