

## Gender Gap in Access to Extension Services: A Case Study

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### ABSTRACT

*The study was undertaken in model village (Giringaput) of Bhubaneswar block in Khurda district of Odisha which has been adopted by DRWA to identify the gender needs of extension approach in agriculture and allied areas. A total of 80 respondents (farm women - 40 and men - 40) were selected for the study. The findings revealed that there was significant difference between women and men while considering extension approaches and the preference need in the areas of message and it was due to prevailing socio-cultural barriers, family attachment, restricted mobility, less time availability, triple responsibility and lack of decision making power with women. Therefore, the change agents should be utmost careful in analyzing the socio-cultural environment of gender to formulate action plans for gender mainstreaming in agriculture extension.*

**Key words:** Gender gap; Extension services;

Agricultural extension services are an important instrument for the provision of information on new technologies and crops (Anderson and Feder, 2003; Evenson, 2001; Doss and Morris, 2001). Many extension approaches have been tried in India to meet the needs of farm women and farmers. However, it has not proportionately reached the farm women as in case of male farmers. The women are not given due importance as they always considered as the farmers' wives. Women were often over looked by extension agents in their extension programmes and extension services often fail to reach female farmers, in particular female-headed farm households (Doss and Morris, 2001; Quisumbing, 1994; Saito et al., 1994); despite strong preference of female farmers for such services (Saito et al., 1994). Several efforts have been made in recent years to develop comprehensive frameworks delineating the various dimensions along which women can be empowered (Malhotra, Schuler and Boender, 2002). Of late, the policy makers are sensitized to develop some extension approaches with women perspective for gender mainstreaming in agriculture where both the men and women can get equal opportunity. But, still gender gap persists in effective delivery of extension services. Keeping this in view, the present study was conducted to identify the gender preferences of extension services in agriculture and allied enterprises.

### METHODOLOGY

The study was undertaken in 2012 Giringaput village of Bhubaneswar block in Khurda district of Odisha. The village was purposefully selected as DRWA has adopted it to develop as a model village for gender mainstreaming and technology application. Covering three hamlets of the village, a total of 80 respondents comprising 40 men and farm women each were randomly selected having farming as major livelihood. Data were collected through pre-tested interview schedule along with group discussion and observation techniques and analyzed with the help of

appropriate statistical tools and techniques. Mean score analysis with  $+/-$  than average was worked out with nine variables to identify the needs of gender regarding extension approaches. Composite analysis was followed by analyzing more than one independent variable to one dependent variable. Score analysis with gap in percentage was done by classifying intensity of contact into three degrees like 'high', 'medium' and 'low' with assigned score of 3, 2 and 1 respectively. The Maximum Obtainable Score (MOS) was 3 and gap in percentage was calculated based on Score Obtained (SO).

For rank order analysis, the responses were collected in a three point scale in terms of 'very much essential' 'essential' and 'not essential' with assigned score of 3, 2 and 1 respectively and rank was given according to the score availability.

### RESULTS AND DISCUSSION

The socio-economic analysis of the respondents revealed that majority of them (63%) were from marginal farm families who had adopted crops + livestock as their production system. Almost all the general caste people had 2-3 cattle whereas the ST families (50%) had 2-3 goats and 2-5 poultry birds as animal resource. The farming + labour were the major occupation for their livelihood. With regard to family type, about 60% had the nuclear family consisting of 4-5 members against joint family (40%). The husbands were the main decision makers in families with regard to farm related activities. With consideration to social participation, the people had much interaction with the ward members, Angan Wadi Workers, Primary School Teachers and Asha Workers.

**Extension needs :** To identify the needs of gender regarding extension approaches, data were collected during interview. Nine variables were covered under this dimension such as: preference for type of contact, time of contact, place of contact, suitable extension agent, effective group methods, boundary of tour, interval of contact, place of meeting and approach for

**Table 1**  
**Gender preference of extension service**

| Sr. No.  | Extension needs                  | Choice                              | Preference of farm women (n = 40) |                    | Preference of men (n = 40) |                    |
|----------|----------------------------------|-------------------------------------|-----------------------------------|--------------------|----------------------------|--------------------|
|          |                                  |                                     | Mean score                        | + / - than average | Mean score                 | + / - than average |
| <b>1</b> | <b>Preferred types contact</b>   |                                     |                                   |                    |                            |                    |
|          | (i)                              | Individual                          | 1.40                              | -                  | 2.33                       | +                  |
|          | (ii)                             | Group                               | 2.80                              | +                  | 2.50                       | +                  |
|          | (iii)                            | Mass                                | 1.20                              | -                  | 2.23                       | +                  |
|          | (iv)                             | Combined                            | 1.37                              | -                  | 2.06                       | -                  |
|          | (v)                              | No choice                           | 1.30                              | -                  | 1.73                       | -                  |
|          | <b>Average</b>                   |                                     | <b>1.61</b>                       |                    | <b>2.17</b>                |                    |
| <b>2</b> | <b>Time of contact</b>           |                                     |                                   |                    |                            |                    |
|          | (i)                              | Morning                             | 1.53                              | -                  | 2.26                       | +                  |
|          | (ii)                             | Evening                             | 1.80                              | +                  | 2.60                       | +                  |
|          | (iii)                            | Mid day                             | 1.43                              | -                  | 1.56                       | -                  |
|          | (iv)                             | Afternoon                           | 2.47                              | +                  | 2.40                       | +                  |
|          | (v)                              | Any time                            | 1.23                              | -                  | 1.80                       | -                  |
|          | <b>Average</b>                   |                                     | <b>1.69</b>                       |                    | <b>2.12</b>                |                    |
| <b>3</b> | <b>Place of contact</b>          |                                     |                                   |                    |                            |                    |
|          | (i)                              | Home                                | 2.53                              | +                  | 2.13                       | -                  |
|          | (ii)                             | Farm                                | 1.60                              | -                  | 2.60                       | +                  |
|          | (iii)                            | Both                                | 1.80                              | -                  | 2.30                       | -                  |
|          | <b>Average</b>                   |                                     | <b>1.97</b>                       |                    | <b>2.34</b>                |                    |
| <b>4</b> | <b>Effective extension agent</b> |                                     |                                   |                    |                            |                    |
|          | (i)                              | Women                               | 2.17                              | +                  | 1.83                       | -                  |
|          | (ii)                             | Men                                 | 1.33                              | -                  | 2.33                       | +                  |
|          | (iii)                            | Village Para Extension Worker       | 1.20                              | -                  | 2.23                       | +                  |
|          | (iv)                             | Women Village Para Extension Worker | 2.20                              | +                  | 1.80                       | -                  |
|          | (v)                              | No choice                           | 1.06                              | -                  | 1.83                       | -                  |
|          | <b>Average</b>                   |                                     | <b>1.59</b>                       |                    | <b>2.04</b>                |                    |
| <b>5</b> | <b>Effective group methods</b>   |                                     |                                   |                    |                            |                    |
|          | (i)                              | Training                            | 1.93                              | +                  | 2.26                       | -                  |
|          | (ii)                             | Focused Group Discussion            | 1.90                              | +                  | 2.43                       | +                  |
|          | (iii)                            | Demonstration                       | 2.20                              | +                  | 2.33                       | -                  |
|          | (iv)                             | Tour                                | 1.50                              | -                  | 2.56                       | +                  |
|          | <b>Average</b>                   |                                     | <b>1.87</b>                       |                    | <b>2.39</b>                |                    |
| <b>6</b> | <b>Boundary of tour</b>          |                                     |                                   |                    |                            |                    |
|          | (i)                              | Within block                        | 2.53                              | +                  | 2.00                       | -                  |
|          | (ii)                             | Within district                     | 1.53                              | +                  | 2.60                       | +                  |
|          | (iii)                            | Outside district                    | 1.03                              | -                  | 2.60                       | +                  |
|          | (iv)                             | Any place                           | 1.00                              | -                  | 2.20                       | -                  |
|          | (v)                              | No choice                           | 1.16                              | -                  | 2.13                       | -                  |
|          | <b>Average</b>                   |                                     | <b>1.45</b>                       |                    | <b>2.30</b>                |                    |
| <b>7</b> | <b>Interval of contact</b>       |                                     |                                   |                    |                            |                    |
|          | (i)                              | Within fortnight                    | 1.40                              | -                  | 2.53                       | +                  |
|          | (ii)                             | Within one month                    | 2.60                              | +                  | 2.63                       | +                  |
|          | (iii)                            | Within two months                   | 1.53                              | -                  | 2.56                       | +                  |
|          | (iv)                             | More than two months                | 1.53                              | -                  | 2.13                       | -                  |
|          | <b>Average</b>                   |                                     | <b>1.76</b>                       |                    | <b>2.46</b>                |                    |
| <b>8</b> | <b>Place of meeting</b>          |                                     |                                   |                    |                            |                    |
|          | (i)                              | Village common place                | 1.06                              | -                  | 2.60                       | +                  |
|          | (ii)                             | House of President/Secy.            | 2.40                              | +                  | 1.80                       | -                  |
|          | (iii)                            | House of any member                 | 2.13                              | +                  | 1.53                       | -                  |
|          | (iv)                             | Neighboring village                 | 1.03                              | -                  | 1.83                       | -                  |
|          | (v)                              | Any place                           | 1.06                              | -                  | 2.13                       | +                  |
|          | <b>Average</b>                   |                                     | <b>1.53</b>                       |                    | <b>1.97</b>                |                    |
| <b>9</b> | <b>Approach for enterprise</b>   |                                     |                                   |                    |                            |                    |
|          | (i)                              | Individual                          | 1.93                              | -                  | 2.53                       | +                  |
|          | (ii)                             | Group                               | 2.53                              | +                  | 1.80                       | -                  |
|          | (iii)                            | Both                                | 2.30                              | +                  | 1.73                       | -                  |
|          | (iv)                             | Any other                           | 1.43                              | -                  | 1.53                       | -                  |
|          | <b>Average</b>                   |                                     | <b>2.04</b>                       |                    | <b>1.89</b>                |                    |



enterprise. Mean score analysis with + / - than average was worked out (Table 1).

As per the data in Table 1, the most preferred type of contact for farm women was 'group contact' (2.80) followed by 'afternoon' as most suitable time of contact (2.47), 'home' as place of contact (2.53), Women Village Para Extension Worker as extension agent (2.20), 'demonstration' as effective group method (2.20), 'within block' as boundary of exposure visit (2.53), 'within one month' as interval of contact (2.60), house of president/secretary as 'place of meeting' (2.40) and 'group approach' for undertaking enterprise (2.53) which emerged as important parameters for planning and implementing extension programmes for the farm women. Women preferred to take extension messages in group contact although men showed interest in all the three methods which might be due to prevailing socio-cultural attitudes and low level of literacy among farm women. In case of time of contact, the triple roles of women led to prefer afternoon as the most suitable time for contact with extension agencies.

**Table 2**  
Composite analysis of extension needs of gender (Score)

| Sr. No. | Profiles                  | Farm women (n = 40) | Farmers (n = 40) | Differences (%) |
|---------|---------------------------|---------------------|------------------|-----------------|
| 1       | Suitable contact          | 1.61                | 2.17             | 25.80           |
| 2       | Timing                    | 1.69                | 2.12             | 20.28           |
| 3       | Place of contact          | 1.97                | 2.34             | 15.81           |
| 4       | Effective extension agent | 1.59                | 2.04             | 22.05           |
| 5       | Effective group method    | 1.87                | 2.39             | 21.75           |
| 6       | Boundary of tour          | 1.45                | 2.30             | 36.95           |
| 7       | Interval of contact       | 1.76                | 2.46             | 28.45           |
| 8       | Place of meeting          | 1.53                | 1.97             | 22.33           |
| 9       | Approach for enterprise   | 2.04                | 1.89             | 7.35            |

Therefore, focus should be given to improve the least preferred variables towards +ness while using for women. On the other hand, the most preferred extension needs identified by the farmers were: 'group contact' (2.50), 'evening' time contact (2.60), 'farm' as place of contact (2.60), male extension agent (2.53), 'tour' as effective group method (2.56), 'within and outside district' as boundary of tour (2.60 & 2.60), interval of contact as 'one month' (2.63), village common place for meeting (2.60) and 'individual approach' for undertaking enterprise (2.53). It is concluded that both the farm women and farmers had differential preferences in seven areas except two i.e. 'group' for preferred type of contact and within one month as ideal interval of contact with varied degrees. The difference might be due to socio-economic barriers and differential needs of gender. This finding has conformity with Sadangi, et. al. (2005) that since, the role of grass root change agent is crucial, utmost care may be taken to analyze the factors like socio-cultural

environment of women and participation of women in agriculture for the purpose of selecting change agents with appropriate background. According to Baden et al., (1994), Sarpong, (2006), extensive responsibilities in the household, combined with demands for working on husband's land or farming activities, limit the time women spend on their own productive economic assets, or it means they work many more hours a day than men.

The composite analysis of extension needs in Table 2 indicates that out of nine dimensions, there was significant difference (more than 10%) between women and men in eight areas and only in one case i.e. approach for undertaking enterprise, there was no significant difference (less than 10%). The reasons behind the differences were socio-cultural environment, family attachment, restricted mobility, less time availability, dual responsibility, lack of self confidence and lack of decision making power with farm women.

**Extension needs of farm women for capacity building :** The extension needs of farm women were ascertained during data collection based on gaining knowledge/skill/understanding/practical experience as reflected below.

The rank order analysis in Table 3 indicates that the farm women desired to gain extension knowledge through personal contact (I) followed by group discussion (II) and audio-visual aids (III) while demonstration (I), field visit (II) and audio-visual aids (III) were identified for skill. Likewise, the approaches as personal contact, exhibition and demonstration were selected to fulfill the understanding of farm women as ranked I, II and III respectively. Demonstration, field visit and audio-visual aids were identified areas to gain practical experience by the farm women.

**Intensity of contact of gender:** Different studies have indicated that the women have less extension contact with change agents in existing system as compared to men. In this respect, it was felt necessary to find out the



**Table 3**  
**Extension needs of farm women to approaches (Rank order)**

| Sr. No | Approaches         | Extension needs of farm women to gain |       |                |                      |
|--------|--------------------|---------------------------------------|-------|----------------|----------------------|
|        |                    | Knowledge                             | Skill | Under-standing | Practical experience |
| 1      | Personal contact   | I                                     | VI    | I              | V                    |
| 2      | Group discussion   | II                                    | VII   | V              | VI                   |
| 3      | Field visit        | V                                     | II    | VI             | II                   |
| 4      | Demonstration      | VII                                   | I     | III            | I                    |
| 5      | Mass media         | VI                                    | VIII  | VIII           | VII                  |
| 6      | Exhibition         | IV                                    | IV    | II             | IV                   |
| 7      | Leaflet            | VIII                                  | V     | VII            | VIII                 |
| 8      | Audio- visual aids | III                                   | III   | IV             | III                  |

**Table 4**  
**Intensity of contact of gender with extension functionalities**

| Sr. No. | Extension functionalities | MOS | Contact of farm women (N = 40) |         | MOS | Contact of farmers (N = 40) |         |
|---------|---------------------------|-----|--------------------------------|---------|-----|-----------------------------|---------|
|         |                           |     | SO                             | Gap (%) |     | SO                          | Gap (%) |
| (i)     | VAW / LVAW                | 3   | 1.90                           | 36.66   | 3   | 1.93                        | 35.66   |
| (ii)    | Livestock Inspector       | 3   | 1.73                           | 42.33   | 3   | 2.30                        | 23.33   |
| (iii)   | Block officers            | 3   | 1.56                           | 48.00   | 3   | 2.66                        | 11.33   |
| (iv)    | NGO workers               | 3   | 1.40                           | 53.33   | 3   | 1.43                        | 52.33   |

intensity of contact of gender with extension functionalities and accordingly score analysis was done. For the purpose, intensity of contact was categorized under three areas like 'high', 'medium' and 'low' with assigned score of 3, 2 and 1 respectively. The MOS was 3 and gap in percentage was calculated based on SO the result of which is reflected in Table 4.

The Table 4 revealed that the gap between farm women and men was nearly same in case of extension contact with Village Agriculture Worker / Lady Village Agriculture Worker (36.66% & 35.66%) and also NGO workers (53.33% & 52.33%). But more gaps were found among farm women in contacting block officers (48%) followed by LI (42.33%) against minimum for men i.e. 11% and 23.33% respectively. Here, it is clear that when gap is more, the contact is less. So, government should take steps to bridge the gaps between the farm women and contact with extension

functionaries for effective extension services. According to Sadangi, et. al. (2010) both farmers and farmwomen were contacted almost equally by men Village Para Extension Workers whereas women Village Para Extension Workers contacted more number of farmwomen than men farmers.

**Preference of gender on important areas of message:** Sometimes the extension agents deliver the particular message to both the gender without any need identification. But it is found that the needs and priorities are different for women and men as their issues also vary. So to see its truth, data were collected on the matter and rank order analysis was made to draw the conclusion.

As per the data in Table 5, the preference of farm women in the areas of message were: mushroom cultivation (I), nutrition garden (II), care of domestic animals (III) and credit facility (IV) in order of

**Table 5**  
**Preference of gender on important areas of message**

| Sr. No. | Areas of message                    |      |                                      |      |
|---------|-------------------------------------|------|--------------------------------------|------|
|         | Message need of farm women (N = 40) | Rank | Message need of men farmers (N = 40) | Rank |
| (i)     | Care of domestic animals            | III  | Crop[ production                     | III  |
| (ii)    | Home management                     | V    | Vegetable/ fruit production          | II   |
| (iii)   | Nutrition garden                    | II   | Plant protection measures            | I    |
| (iv)    | Credit facility                     | IV   | Agriculture machineries              | IV   |
| (v)     | Mushroom cultivation                | I    | Weather information                  | VI   |
| (vi)    | Income generating activities        | VI   | Market link                          | V    |
| (vii)   | Preservation of fruits & vegetables | VII  | Credit and subsidy                   | VII  |



preference while the least preference areas were preservation of fruits and vegetables, income generating activities and home management. On the other hand, there was difference while considering preference of men as they had ranked plant protection measures, vegetable/fruit production, crop production and agriculture machineries with assigned score of I, II, III and IV respectively. Other factors having least importance were market link, weather information and credit & subsidy. Therefore, the extension functionaries should take care to deliver messages according to the needs of the gender.

#### Special observation in village:

- (i) As far as technology rejection is considered, some of the ST farmers (Sabar) in Badasahi of the village opined that they had rejected the use of insecticides in brinjal crop as per recommendation of extension functionaries.
- (ii) Regarding technology adoption, recently (2012, Kharif) majority of the farm families had adopted the line transplanting in rice crop as free incentives were provided by the state government. Further, the HYV of rice like Swarna, Puja, Mausuri, Moti and Padmini were adopted because of more yield.
- (iii) The trend of decreasing cultivable land under rice was observed due to (i) high labour cost, (ii) less profit margin, (iii) damage by elephant, (iv) supply of rice to BPL people @ Rs.2/- by government and (v) social pressure of builders for sale of land.
- (iv) Sometimes the rice fields were damaged due to

overflow of water from Deras dam which discouraged the growers for farming.

- (v) With regard to natural calamity, super cyclone had compelled some of the villagers to sale their lands for the purpose of constructing concrete house, purchasing bullocks and daughters marriage.
- (vi) Another social issue was that although the village consisted of Sabar families (tribes) in two of its hamlets still they are not declared as ST by government due to which they are deprived of all the facilities meant for the tribes.
- (vii) The attitude of youths was observed having no interest for agriculture rather more interest for construction work where wage rate was more with less physical labour.
- (viii) Although the village is only 20 km away from state capital, still there is neither public nor private transport facility and development is very slow.

#### CONCLUSION

The findings of the study indicates that there is significant difference between men and women farmers in preferences of extension approaches for getting better services. Therefore, the extension agents should take utmost care to analyze the socio-cultural environment of gender and accordingly formulate

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