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### An assessment of group dynamics effectiveness, constraints and strategies for effective functioning of women farmer interest groups under ATMA

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#### Abstract

Humans are inherently social beings who form groups to meet their biological, social, and economic needs. Since most human activities occur within group settings, understanding group formation and functioning is essential to assess their influence on members' behaviour, motivation, and productivity. Group dynamics refers to the physical, moral, social, and economic forces that shape group performance. Farmers interest groups often emerge naturally based on shared characteristics such as caste, community, place of origin, or common activities, even before formal institutional interventions, thereby facilitating collective action and improved productivity. The present study was conducted in Navsari district of Gujarat state. A total of 120 members of Farmer Interest Groups (FIGs) under the Agricultural Technology Management Agency (ATMA) were selected from eight FIGs across four talukas. Standardized scales developed by earlier researchers were used to measure group dynamics effectiveness in line with the objectives of the study. Data were collected through personal interviews and analysed using appropriate statistical tools. The results showed that most FIG members exhibited high levels of participation, teamwork, interpersonal trust, achievement of FIG, interpersonal communication, group democracy and favourable attitudes towards FIGs. Medium levels of group cohesiveness and very high levels of group atmosphere, leadership, decision-making procedures and task functions were observed. Overall, 65.00 per cent of members had high group dynamics effectiveness, followed by 26.67 per cent with very high and 8.33 per cent with medium effectiveness. Excessive expectations of government and external support (92.50 per cent) emerged as the major constraint affecting effective group functioning, followed by personal and local issues, inadequate managerial experience, weak extension–farmer interaction and irregular meeting attendance. To address these constraints, respondents suggested more income-generating skill training, adequate financial support and subsidies to women beneficiaries and regular participation in group meetings.

**Keywords:** Decision-making, farmer interest groups, group dynamics and women beneficiaries

#### Introduction

Agricultural extension in India has undergone significant transformation since the implementation of the Training and Visit (T&V) system during the 1970s to the early 1990s. The changing agricultural landscape, characterized by the predominance of small and marginal landholdings and a substantial proportion of rain-fed farming areas, highlighted the need for a more integrated, inclusive, and responsive extension approach. Consequently, extension reforms have progressively shifted from conventional top-down methods to decentralized, participatory, and pluralistic extension systems.

Among the major initiatives introduced to strengthen agricultural extension in India are the Agricultural Technology Management Agency (ATMA) and the National Agricultural Technology Project (NATP). These programmes aim to enhance research–extension linkages and address persistent challenges within the agricultural sector. While ATMA demonstrated positive outcomes in its pilot phase, its nationwide implementation produced mixed

results, reflecting institutional, regional, and implementation complexities. Within the ATMA framework, local Non-Governmental Organizations (NGOs) play a pivotal role in mobilizing Farmers' Interest Groups (FIGs) and Self-Help Groups (SHGs), which are subsequently organized into producer groups by extension personnel. This arrangement strengthens decentralized decision-making at the block level and enables active participation of FIGs and SHGs in the preparation and approval of Block Action Plans (BAPs). Planning instruments such as the Strategic Research and Extension Plan (SREP) and the State Extension Work Plan (SEWP) further facilitate convergence among line departments, research institutions, and extension agencies. Behavioural scientists emphasize that a substantial proportion of human activities occur within group contexts, underscoring the importance of group dynamics. Women Farmer Interest Groups (FIGs) have emerged as effective platforms for learning, cooperation, and empowerment. A systematic understanding of the factors influencing group dynamics effectiveness within women FIGs under ATMA is

therefore essential. This study represents a modest effort to generate structured knowledge to strengthen extension effectiveness and ensure sustained institutional support for women farmers.

### Objective

1. To measure the group dynamics effectiveness of women members of FIGs
2. To explore the constraints faced by members of women FIGs and to suggest the suitable strategy for strengthening the group dynamics effectiveness of women FIGs registered under ATMA

### Methodology

The study was conducted in Navsari districts of Gujarat state. 120 FIGs members from eight FIGs of four talukas were selected as respondents. Suitable and appropriate scales developed by past researchers were used for the measurement in light of the derived objective as well as different indicators of group dynamics effectiveness. The data were collected through personal interview and then after it is compiled, tabulated and analyzed to get proper answer for studying Group Dynamics Effectiveness of Women FIGs, Constraints faced by the respondents and Suggestions offered by the respondents in women FIGs under ATMA with the help of various appropriate statistical tools.

### Results and Discussion

#### Group Dynamics Effectiveness of the members of women Farmers Interest Groups under ATMA

This section includes the distribution of the FIGs members according to their level of degree with respect to different indicators of group dynamics effectiveness index and their overall GDEI.

#### Different indicators of group dynamics effectiveness of the members of FIGs

For effective functioning of the groups, there are various indicators who played an important role in determination of group dynamics effectiveness. The indicators like participation, group cohesiveness, team building, interpersonal trust, task function, achievement of FIG, interpersonal communication, group democracy and attitude towards FIG, have closely related with group dynamics process of group. In this study 12 indicators were selected and the data which reflect the degree of their level with regards to all 12 indicators are presented in table 1.

Participation refers to the extent to which group members are involved in group meetings, discussions, and activities of the FIGs, which is essential for enhancing the effectiveness of group functioning and maximizing benefits. The data, categorized into five levels and presented in Figure 1, reveal that more than half (59.17 per cent) of the FIG members had a high level of participation, followed by 18.33 per cent with very high participation, 15.83 per cent with medium participation, and 6.67 per cent with low participation. The findings indicate that the majority of FIG members exhibited a high level of participation. This may be attributed to their higher economic and achievement motivation, which encouraged greater involvement in group activities and contributed to improved group performance. These findings are supported by Darji (2018) <sup>[4]</sup> and Patil (2019) <sup>[9]</sup>.

**Table 1:** Distribution of the FIGs members according to different indicators of GDE (n=120)

| Sr. No. | Indicators                  | Categories                  | Frequency | Percentage |
|---------|-----------------------------|-----------------------------|-----------|------------|
| 1       | Participation               | Very low (< 18)             | 00        | 00.00      |
|         |                             | Low (18 - 26)               | 08        | 06.67      |
|         |                             | Medium (26 - 34)            | 19        | 15.83      |
|         |                             | High (34 - 42)              | 71        | 59.17      |
|         |                             | Very high (> 42)            | 22        | 18.33      |
| 2       | Team work                   | Very poor (< 18)            | 00        | 00.00      |
|         |                             | Poor (18 - 26)              | 15        | 12.50      |
|         |                             | Fair (26 - 34)              | 18        | 15.00      |
|         |                             | Good (34 - 42)              | 63        | 52.50      |
|         |                             | Excellent (> 42)            | 24        | 20.00      |
| 3       | Group atmosphere            | Very poor (< 18)            | 00        | 00.00      |
|         |                             | Poor (18 - 26)              | 02        | 01.67      |
|         |                             | Fair (26 - 34)              | 32        | 26.67      |
|         |                             | Good (34 - 42)              | 37        | 30.83      |
|         |                             | Excellent (> 42)            | 49        | 40.83      |
| 4       | Decision making procedure   | Very poor (< 18)            | 00        | 00.00      |
|         |                             | Poor (18 - 26)              | 03        | 02.50      |
|         |                             | Fair (26 - 34)              | 26        | 21.67      |
|         |                             | Good (34 - 42)              | 43        | 35.83      |
|         |                             | Excellent (> 42)            | 48        | 40.00      |
| 5       | Group cohesiveness          | Very poor (< 18)            | 01        | 00.83      |
|         |                             | Poor (18 - 26)              | 06        | 05.00      |
|         |                             | Fair (26 - 34)              | 45        | 37.50      |
|         |                             | Good (34 - 42)              | 38        | 31.67      |
|         |                             | Excellent (> 42)            | 30        | 25.00      |
| 6       | Group Leadership            | Very poor (< 14.4)          | 01        | 00.83      |
|         |                             | Poor (14.4 - 20.8)          | 03        | 02.50      |
|         |                             | Fair (20.8 - 27.2)          | 32        | 26.67      |
|         |                             | Good (27.2 - 33.6)          | 36        | 30.00      |
|         |                             | Excellent (> 33.6)          | 48        | 40.00      |
| 7       | Interpersonal trust         | Very low (< 18)             | 00        | 00.00      |
|         |                             | Low (18 - 26)               | 02        | 01.67      |
|         |                             | Medium (26 - 34)            | 24        | 20.00      |
|         |                             | High (34 - 42)              | 61        | 50.83      |
|         |                             | Very high (> 42)            | 33        | 27.50      |
| 8       | Task function               | Very low (< 16.2)           | 00        | 00.00      |
|         |                             | Low (16.2 - 23.4)           | 02        | 01.67      |
|         |                             | Medium (23.4 - 30.6)        | 12        | 10.00      |
|         |                             | High (30.6 - 37.8)          | 40        | 33.33      |
|         |                             | Very high (> 37.8)          | 66        | 55.00      |
| 9       | Achievement of FIG          | Very low (< 28.8)           | 01        | 00.83      |
|         |                             | Low (28.8 - 41.6)           | 04        | 03.33      |
|         |                             | Medium (41.6 - 54.4)        | 15        | 12.50      |
|         |                             | High (54.4 - 67.2)          | 62        | 51.67      |
|         |                             | Very high (> 67.2)          | 38        | 31.67      |
| 10      | Interpersonal communication | Very poor (< 18)            | 00        | 00.00      |
|         |                             | Poor (18 - 26)              | 02        | 01.67      |
|         |                             | Fair (26 - 34)              | 23        | 19.17      |
|         |                             | Good (34 - 42)              | 52        | 43.33      |
|         |                             | Excellent (> 42)            | 43        | 35.83      |
| 11      | Group democracy             | Very poor (< 18)            | 00        | 00.00      |
|         |                             | Poor (18 - 26)              | 03        | 02.50      |
|         |                             | Fair (26 - 34)              | 36        | 30.00      |
|         |                             | Good (34 - 42)              | 43        | 35.83      |
|         |                             | Excellent (> 42)            | 38        | 31.67      |
| 12      | Attitude towards FIG        | Strongly unfavorable (< 18) | 00        | 00.00      |
|         |                             | Unfavorable (18 - 26)       | 00        | 00.00      |
|         |                             | Neutral (26 - 34)           | 36        | 30.00      |
|         |                             | Favourable (34 - 42)        | 56        | 46.67      |
|         |                             | Strongly favourable (> 42)  | 28        | 23.33      |
| Total   |                             |                             | 120       | 100.00     |

Team work refers to the extent to which group members maintain unity, work collectively towards common goals, and are willing to attribute success to combined efforts. Team work enhances the synergistic effect and efficiency of group activities. The data presented in Table 1 show that more than half (52.50 per cent) of the FIG members had a high level of team work, followed by 20.00 per cent with excellent team work, 15.00 per cent with fair team work, and 12.50 per cent with poor team work. No respondent was found in the very poor category. Overall, the majority of respondents were found to possess good to excellent levels of team work. A favourable attitude towards collectivism and the close-knit nature of rural social relationships may explain this pattern. These findings are in agreement with Ganguly (2005) [5], Bhatt (2010) [2], and Darji (2018) [4].

The working atmosphere within a group significantly influences individual performance. The findings indicate that 40.00 per cent of FIG members experienced an excellent group atmosphere, followed by 30.00 per cent with good, 26.67 per cent with fair, and 1.67 per cent with poor atmosphere, suggesting that the majority perceived a favourable environment conducive to effective group functioning, with minimal conflicts observed during field visits (Bhatt, 2010; Darji, 2018; Patil, 2019) [2, 4, 9]. Regarding decision-making, 40.00 per cent of members exhibited excellent ability, followed by 35.83 per cent good, 21.67 per cent fair, and 2.50 per cent poor, indicating that most members possessed strong collective decision-making capacity, which is essential for managing routine and crisis situations in poultry enterprises (Ganguly, 2005; Bhatt, 2010; Patil, 2019) [5, 2, 9]. Group cohesiveness was found to be fair among 37.50 per cent of members, good among 31.67 per cent, excellent among 25.00 per cent, while only 5.83 per cent fell under poor to very poor categories, showing that most members exhibited medium to high cohesiveness, enabling better teamwork and problem-solving (Darji, 2018; Patil, 2019) [4, 9]. Leadership qualities were excellent among 40.00 per cent of members, followed by good (30.00 per cent), fair (26.67 per cent), and poor to very poor (3.33 per cent), indicating that most members

demonstrated effective leadership supported by active participation, trust, and communication, partially aligning with earlier findings (Purnima, 2005; Darji, 2018) [1, 4]. Interpersonal trust was high among 50.83 per cent and very high among 27.50 per cent of members, with no respondent in the very low category, reflecting strong solidarity and collectivist orientation within the groups (Purnima, 2005; Bhatt, 2010; Darji, 2018; Patil, 2019) [1, 2, 4, 9]. Task function performance was very high for 55.00 per cent and high for 33.33 per cent of members, indicating that effective decision-making translated into efficient task execution (Ganguly, 2005) [5]. Achievement levels were high among 51.67 per cent and very high among 31.67 per cent of members, suggesting that internal motivation combined with external support from ATMA personnel contributed to improved group outcomes (Ganguly, 2005; Darji, 2018; Patil, 2019) [5, 4, 9]. Interpersonal communication was good among 43.33 per cent and excellent among 35.83 per cent of members, reflecting strong social ties and proximity among group members (Ganguly, 2005; Darji, 2018) [5, 4]. Group democracy was perceived as good to excellent by the majority of members (67.66 per cent), indicating adequate freedom in expression, leadership selection, and participatory discussions, although this contrasts with Darji (2018) [4]. Attitude towards FIG was favourable among 46.67 per cent and strongly favourable among 23.33 per cent of members, with no unfavourable responses, demonstrating that effective group performance and problem-solving through a collective approach fostered positive attitudes towards FIGs, contrary to earlier reports (Patel & Chauhan, 2016; Darji, 2018) [7, 4].

### Constraints faced by respondents in women figs under ATMA

Constraints imply forcible restriction and confinement of action. During investigation the group members expressed many reasons due to which they could not participate and performed well in their FIGs. These causes were termed as the constraints. Data in this regard are presented in table 2.

**Table 2:** Constraints faced by the FIGs members for effective functioning of the group (n=120)

| Sr. No. | Constraints                                                                       | Frequency | Percentage | Rank |
|---------|-----------------------------------------------------------------------------------|-----------|------------|------|
| 1       | Women groups think for getting more and more from government and other agencies   | 111       | 92.50      | I    |
| 2       | Personal and local issues and problems enter in group activities                  | 108       | 90.00      | II   |
| 3       | Lack of managerial experience                                                     | 94        | 78.33      | III  |
| 4       | Poor interaction among extension worker and farmer                                | 92        | 76.67      | IV   |
| 5       | Members were not attending meeting regularly                                      | 81        | 67.50      | V    |
| 6       | Less participation of women                                                       | 77        | 64.17      | VI   |
| 7       | Absence of location specific technology                                           | 69        | 57.50      | VII  |
| 8       | Lack of training for conducting various activities of group                       | 62        | 51.67      | VIII |
| 9       | At a time of becoming member, did not know the purpose behind the group formation | 58        | 48.33      | IX   |
| 10      | Lack of information regarding marketing strategy                                  | 31        | 25.83      | X    |
| 11      | Sometimes leader did not take strong decision                                     | 28        | 23.33      | XI   |

The data presented in Table 2 indicate that the major constraint affecting the effective functioning of groups was the tendency of members to expect increasing support from government and other agencies, as reported by an overwhelming majority (92.50 per cent) of the respondents. This was followed by the intrusion of personal and local issues into group activities (90.00 per cent), lack of

managerial experience (78.33 per cent), poor interaction between extension workers and farmers (76.67 per cent), and irregular attendance of members in group meetings (67.50 per cent). Other constraints reported included less participation of women (64.17 per cent), absence of location-specific technologies (57.50 per cent), lack of training for conducting various group activities (51.67 per

cent), lack of awareness about the purpose of group formation at the time of becoming a member (48.33 per cent), inadequate information regarding marketing strategies (25.83 per cent), and instances where leaders failed to take strong decisions (23.33 per cent). Overall, it can be concluded that excessive dependence on government and external agencies, dominance of personal and local issues over group activities, inadequate managerial experience, weak extension–farmer interaction, and irregular meeting attendance were the major constraints perceived by most group members in the effective functioning of the groups.

**Table 3:** Suggestions offered by the members of women FIGs (n=120)

| Sr. No. | Suggestions                                                                                  | Frequency | Per cent | Rank |
|---------|----------------------------------------------------------------------------------------------|-----------|----------|------|
| 1       | More income - generating skills training should be organized for the members                 | 87        | 72.50    | I    |
| 2       | Women beneficiaries should be provided with adequate financing and subsidies                 | 76        | 63.33    | II   |
| 3       | Members should arrive in time to attend meetings                                             | 71        | 59.17    | III  |
| 4       | Literacy for women must be promoted                                                          | 68        | 56.67    | IV   |
| 5       | Cooperation between members is necessary                                                     | 61        | 50.83    | V    |
| 6       | Providing opportunities for women in business                                                | 55        | 45.83    | VI   |
| 7       | Maintain the register regularly                                                              | 51        | 42.50    | VII  |
| 8       | Community hall for FIGs                                                                      | 44        | 36.67    | VIII |
| 9       | Rotation wise responsibility must be made mandatory                                          | 36        | 30.00    | IX   |
| 10      | For marketing, long - distance and fast transport facilities should be made easily available | 31        | 25.83    | X    |

It could be vividly seen from the table 3 that maximum number of respondents suggested that more income - generating skills training should be organized for the members ranked first with 72.50 per cent followed by women beneficiaries should be provided with adequate financing and subsidies (63.33 per cent), members should arrive in time to attend meetings (59.17 per cent), literacy for women must be promoted (56.67 per cent), cooperation between members is necessary (50.83 per cent), providing opportunities for women in business (45.83 per cent), maintain the register regularly (42.50 per cent), community hall for FIGs (36.67 per cent), rotation wise responsibility must be made mandatory (30.00 per cent) and for marketing, long - distance and fast transport facilities should be made easily available (25.83 per cent). From the data represented in table 3 it can be concluded that majority of the members offered more income - generating skills training should be organized for the members, women beneficiaries should be provided with adequate financing and subsidies and the members should arrive in time to attend meetings. The present finding gets support from the findings reported by Bhagyasree (2014) [3].

### Conclusion

The study highlights positive dynamics among FIG members, with most actively participating in group activities and demonstrating good teamwork. Group atmosphere and decision-making were largely rated as excellent, indicating a conducive environment and effective processes. Members exhibited strong group cohesiveness and leadership qualities, along with high levels of interpersonal trust and task function. Achievement levels of FIGs were notable, supported by good interpersonal communication and democratic practices. Attitudes toward FIGs were predominantly favourable, reflecting strong collaboration and productivity within the groups. The findings indicate that the majority of FIG members

### Suggestions offered by the respondents in women FIGs under ATMA

The suggestions given by the respondents were collected to improve the effectiveness and sustainability of women Farmers Interest Groups. For strengthening the group dynamics effectiveness, some observations made during field survey, research findings, discussed points with the grass root level ATMA personals were also incorporated. The suggestions offered by the women members are arranged in descending order of their frequency and percentage.

demonstrated high group dynamics effectiveness, with a significant portion achieving very high effectiveness. A smaller group was categorized under medium effectiveness. This reflects a predominantly strong performance and collaboration among FIG members, highlighting the overall effectiveness of their group dynamics.

### Policy implication

1. Future research on farmers interest group dynamics may be undertaken by qualitative approaches such as in-depth case studies of FIGs, investigating reports and participation observation.
2. There is need to examine critically the impact of Group Dynamics of FIGs of different organizations. Future research can be undertaken on similar organizations where group activity is prominent.

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### Conflict of Interest

The authors of the paper declare no conflict of interest

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