

## DIMENSIONS OF SELF HELP GROUP DYNAMICS OF HORTICULTURE FARMERS

Vipin Kumar, V.P.<sup>1</sup> & Baldeo Singh<sup>2</sup>

The concept of 'Self Help Group' (SHG) exists prior to any intervention. The members are linked by a common bond like caste, sub-caste, blood, community, place of origin or activity in these 'natural groups' or 'affinity groups'. The 'SHGs' provide the benefits of economies in certain areas of production process by undertaking common action programmes like cost effective credit delivery system, generating a forum for collective learning with rural people, promoting democratic culture, fostering an entrepreneurial culture, providing a firm base for dialogue and co-operation in programmes with other institutions, possessing credibility and power to ensure participation and helping to assess the individual member's management capacity (Fernandez, 1995).

Lewin (1936) popularised the term Group Dynamics to mean interaction of forces among group members in a social situation. It is the internal nature of the group as to how they are formed, what their structures and processes are, how they function and affect individual members, other groups and the organisation. (Lewin et. al. 1960). In an intensive study of Group Dynamics, Pfeiffer and Jones (1972) identified the Group Dynamics factors as to how the group is organised, the manner in which the group is led, the amount of training in membership and leadership skills, the tasks given to the groups, its prior history of success or failure etc. The identified indicators by them for analysing Group Dynamics are participation, influence, styles of influence, decision making procedures, task functions, maintenance functions, group atmosphere, membership, feelings and norms. The detailed study of Group Dynamics by Hersey and Blanchard (1995) gave emphasis on helping and hindering roles individuals play in groups such as establishing, aggressive, persuading, manipulative, committing, dependent, attending and avoidance.

In the light of these, a study is planned to understand Group Dynamics and the dimensions influencing the effectiveness of Group Dynamics of SHGs constituted under Kerala Horticulture Development Programme (KHDP). It is a joint venture of Commission of European Communities (CEC) and the Govt. of Kerala signed on 17-01-92 with the total financial outlay of Rs. 131.44 crores (KHDP, 1997).

KHDP is aimed to create replicable models of horticulture enterprise in selected geographic locations in Kerala. All the programme activities are converging into voluntary neighbourhood groups of about 20 farmers organised into SHGs within the pilot project areas. Each of these SHGs has master farmers in Production, Marketing & Credit who are trained to take up lead role and act as facilitators. This strategy is aimed to provide sustainability to the developmental process and ensures greater farmer participation.

The Group Dynamics is a multivariate phenomenon explained by a wide spectrum of dimensions operating at varying levels among members of the group. These sub-dimensions are so indirectly associated with each other and a holistic view of all these contributing sub-dimensions, only would give a clear picture of the interactional implication of the process of Group Dynamics.

1. Scientist, Calicut Research Centre of Central Marine Fisheries Research Institute.
2. Prof. & Head, Division of Agricultural Extension, IARI, New Delhi.

**METHODOLOGY :**

The study was conducted in the important pilot projects of KHDP where active Self Help Groups are in operation. The past experiences and ample literature indicated that for a group, to be developed as a Self Help Group, it requires a minimum period of 24 to 36 months. Therefore, three districts namely Ernakulam, Kottayam and Trivandrum where such groups which reached the Self helping stage were selected. From each of these districts, four different sites (panchayats) were selected and from each site, one SHG was selected comprising in total 12 SHGs. From each of the SHG selected at random from each site, 15 members were identified as respondents using simple random sampling procedures. Therefore in total, 180 respondents from among the members of SHGs were selected as the sample of the study. The data were collected through personal interview method.

For the study, the Group Dynamics of members of SHGs was measured by developing an index called Group Dynamics Effectiveness Index (GDEI). Group Dynamics Effectiveness (GDE) was operationally defined for the study as sum-total of the forces among the member of SHG based on the sub-dimensions, such as participation, influence & styles of influence, decision making procedures, task functions, maintenance functions, group atmosphere, membership, feelings, norms, empathy, interpersonal trust and achievements of SHG. These sub-dimensions were subjected to relevancy rating by a sample of scientists and extension personnel to ascertain whether all the sub-dimensions are equally applicable to the GDE or not. The relevancy rating revealed that all the sub-dimensions were relevant in the case of GDE.

The judges were further requested to assign weightage for each sub-dimension in the range of 0 to 100, based on the importance they attached to each sub-dimension in such a manner as to get a total of 100 for all the identified relevant sub-dimensions. They were asked to consider the importance of each sub-dimension in relation to GDE while assigning the weightage to each sub-dimension. The scores obtained by a particular sub-dimension were added up and was divided by the number of judges to arrive at the weightage for a particular sub-dimension. This procedure was carried out in case of all the identified relevant sub-dimensions. These sub-dimensions along with their weightages thus obtained are furnished in table 1.

**Table 1. Dimensions of GDE and weightages.**

Sl.No.	Dimensions	Weightage
1.	Participation	1.0
2.	Influence & style of influence	0.9
3.	Decision making procedures	0.8
4.	Task Functions	0.8
5.	Maintenance Functions	0.8
6.	Group Atmosphere	0.9
7.	Membership	0.7
8.	Feelings	0.7
9.	Norms	0.7
10.	Empathy	0.8
11.	Interpersonal Trust	0.8
12.	Achievements of SHG	1.1
	<b>Total</b>	<b>10.0</b>

The actual score for each sub-dimension was obtained by Scale Product method i.e., by multiplying its raw score by its weightage. The total score of GDEI for an individual was obtained by adding the individual scores of each component together. For the measurement of the first nine sub-dimensions, the procedure followed by *Pfeiffer and Jones (1972)* with modifications was used and for the last three sub-dimensions separate schedules were developed.

For the computation of the GDEI the scores obtained for each of the above mentioned sub-dimensions were first made uniform and then multiplied by the corresponding weightage

8  
assigned to each as given in table 1. These scores were then added up to get the GDEI score of each respondent.

A pilot study was undertaken in a non-sample area with sixty respondents selected at random. The data were analysed with appropriate statistical techniques. The result showed that slight modifications were necessary for some questions for the sub-dimensions of the dependent variable. After discussions with experts and on the basis of the empirical analysis the questionnaire was restructured and modified for the final data collection.

It was also ensured that all the sub-dimensions identified as components of GDE were of high significance on the basis of the coefficient of agreement in judges rating as well as the statistical evidence from the results of the pilot study. The measurement device developed for the dependent variable *i.e.*, GDE was ascertained for its content validity.

### Measurement of Sub-dimensions :

**(A) Participation**—For the present study, participation was operationally defined as the degree to which the farmer is involved in group meetings, discussions and group activities of SHG.

**(B) Influence & style of influence**—Influence was operationally defined as the degree to which a farmer can influence other member of SHG in a desirable way. Style of influence was operationalised as the manner in which the member attempts to influence other members of SHG. The four different styles included were autocratic style, peacemaker style, laissez-faire style and democratic style.

**(C) Decision making procedures**—This is operationally defined as the degree to which farmer makes a decision with involvement of other group member of SHG, makes decisions without topic drifting, supports other member's decisions in consensus, feels the majority's decisions valid in the SHG, attempts to get all members participate in decisions of SHG and feels the gains of recognition for his contribution in decision making process.

**(D) Task Functions**—This is operationalised as the degree to which the farmer makes suggestions to tackle a problem in the SHG, summarises what has been covered in the group, tries to give or ask for facts, ideas, opinions, feelings, feed back etc. and keeps the group on target.

**(E) Maintenance Functions**—This is operationalised as the extent to which farmer helps others into group activities of SHG, helps/interrupts him in group discussions, feels the other members are co-operative and listening, perceives other members help in clarifying the ideas of all members, feels good or bad when ideas are accepted or rejected and the extent to which other members attempt to maintain task functions of SHG.

**(F) Group Atmosphere**—This is operationalised as the extent to which the group member prefers friendly congenial atmosphere in the SHG, attempts to suppress conflict or unpleasant feelings in the group, feels other members are involved and interested and feels satisfied from the work climate.

**(G) Membership**—This is operationally defined as the degree to which a group member feels accepted or included in the SHG, feels sub-grouping in the SHG and feels himself or other members to be outside the group.

**(H) Feelings**—This is operationally defined as the degree to which the farmer feels anger/irritation, frustration, warmth, affection, excitement/boredom and competitiveness while performing the group activities of SHG.

(I) **Norms**—This is operationalised as the extent to which the farmer feels the standard or ground rules and regulations are in operation that control the behaviour of group members for the smooth functioning of the SHG.

(J) **Empathy**—This is operationally defined as the degree to which the respondent is able to make out other person's feelings and thereby to understand it as he feels.

(K) **Interpersonal Trust**—This is operationally defined as the degree to which the respondent trusts the other members of the group as well as the faith of the other members have in him as perceived by the respondent.

(L) **Achievements of SHG**—This is operationalised as the level of performance of SHG as perceived by the farmer as well as the performance of the farmer himself as the group member.

All these sub-dimensions were measured by a set of inventories containing appropriate questions arranged in a three-point continuum of always, sometimes and never with scoring pattern 2, 1 and 0 for positive and vice versa for negative questions.

## RESULTS AND DISCUSSIONS :

The variation in Group Dynamics Effectiveness between groups is shown in table 2, the distribution of respondents based on the GDEI score in table 3 and the distribution based on sub-dimensions in table 4.

**Table 2. Analysis of variance in GDE of SHGs**

Source of Variation	Degrees of freedom	Sum of squares	Mean sum of squares	Variance ratio "F"
Between groups	11	14368.0635	1306.1876	18.1892**
Error	168	12064.2645	71.81110	
<b>Total</b>	<b>179</b>			

\*\* Significant at 1% level of significance.

The ANOVA table depicts that considerable variation in GDE among different respondents and different groups, because of the significant variance ratio ( $F=18.1892$ ). Group Dynamics is a multivariate phenomena influenced by a variety of interacting factors those interplay in varying strengths.

The study focussed attention on GDE as a trait of Self Help Group resulted by the joint influence of individual members of the group generated out of skills and orientations from the past life experiences. It definitely varies from person to person, place to place, time to time, situation to situation and in turn from group to group. This might be the probable reason for the differential degree of GDEI observed among respondents.

**Table 3. Distribution of Respondents based on GDEI score (n=180)**

No.	Category	Range	Frequency	Percent
1.	Low	<61.35	86	47.78
2.	High	≥61.35	94	52.22

The results in table 3 showed distinctly that 52.22 percent of respondents were in high category for the dependent variable GDE.

Since the operations of cultivation aspects have to be accomplished with full co-operation and co-ordination of all the members of SHG it brought about adequate group interaction among the members and thereby majority of respondents possessed good GDEI score. This is the possible explanation, for majority of farmers in higher category of GDEI.

**Table 4. Distribution of respondents based on the identified sub-dimensions of GDE (n=180)**

Variable	Sub-dimension	Category	Range	Frequency	Percent
1.	Participation	Low	< 6.56	79	43.89
		High	≥ 6.56	101	56.11
2.	Influence and style of influence	Low	< 5.91	85	47.22
		High	≥ 5.91	95	52.78
3.	Decision making procedure	Low	< 4.92	90	50.00
		High	≥ 4.92	90	50.00
4.	Task functions	Low	< 4.6	95	52.78
		High	≥ 4.6	85	47.22
5.	Maintenance function	Low	< 4.43	109	60.56
		High	≥ 4.43	71	39.44
6.	Group atmosphere	Low	< 5.69	89	49.44
		High	≥ 5.69	91	50.56
7.	Membership	Low	< 4.18	71	39.44
		High	≥ 4.18	109	60.56
8.	Feelings	Low	< 4.31	98	54.44
		High	≥ 4.31	82	45.56
9.	Norms	Low	< 3.96	78	43.33
		High	≥ 3.96	102	56.67
10.	Empathy	Low	< 4.3	70	38.89
		High	≥ 4.3	110	61.11
11.	Interpersonal trust	Low	< 5.15	88	48.89
		High	≥ 5.15	92	51.11
12.	Achievements of SHG	Low	< 7.3	86	47.78
		High	≥ 7.3	94	52.22

Similarly the results in table 4 showed the majority of respondents in the high category with regard to the sub-dimensions namely participation, influence and styles of influence, group atmosphere, membership, norms, empathy, interpersonal trust and achievements of SHG. Respondents were equally distributed for the sub-dimension 'decision making procedures' for low and high category where as, the majority of respondents were found in the lower category with regard to the sub-dimensions namely task functions, maintenance functions and feelings. This necessitates the improvement in the meticulous execution of the task functions of the SHG and maintaining those functions for the group. A genuine need of the personal consideration of the feelings of farmers also is a must for efficient Group Dynamics and substantial performance of SHG.

A perusal of the table 5 indicated that all the twelve sub-dimensions were positively and significantly related with GDEI at 1% level of significance. The results in the simple correlation analysis clearly shows that Group atmosphere is the most important sub-dimension of GDE owing to its highest correlation coefficient by Participation and Achievements of SHG.

**Table 5. Simple correlation analysis of sub-dimensions of GDE with GDEI (n=180)**

Vari. No.	Characteristic	Correlation Coefficient
1.	Participation	0.9468**
2.	Influence & Styles of influence	0.9384**
3.	Decision making procedures	0.9188**
4.	Task functions	0.9073**
5.	Maintenance functions	0.9126**
6.	Group atmosphere	0.9493**
7.	Membership	0.8743**
8.	Feelings	0.8792**
9.	Norms	0.8840**
10.	Empathy	0.8687**
11.	Interpersonal trust	0.9177*
12.	Achievements of SHG	0.9446**

\*\* Significant at 1% level of significance

The other dimensions affecting Group Dynamics in the descending order are influence and styles of influence, decision making procedures, interpersonal trust, maintenance functions, task functions, norms feelings, membership and empathy respectively.

**Table 6. Multiple linear regression analysis of sub-dimensions of GDE with GDEI (n=180)**

Variable Number	Characteristic	Regression Coefficient	Standard partial regression Coefficient	't' value
1.	Participation	1.020159	0.058090	17.56161**
2.	Influence & Style of influence	1.017987	0.058495	17.40294**
3.	Decision making procedures	0.943436	0.0557610	16.91937**
4.	Task functions	0.970530	0.042269	22.96056**
5.	Maintenance functions	1.050879	0.049662	21.16056**
6.	Group atmosphere	1.004988	0.056979	17.63793**
7.	Membership	1.001861	0.039818	25.1611**
8.	Feelings	0.986789	0.036973	26.68924**
9.	Norms	1.026186	0.045751	22.42987**
10.	Empathy	0.965693	0.029890	32.30784**
11.	Interpersonal trust	1.075611	0.040681	26.44037**
12.	Achievements of SHG	0.935438	0.044775	20.89196**

Intercept = 0.143732,  $R^2 = 0.9995$ ,  $F = 116.5985^{**}$

\*\* Significant at 1% level of significance

The findings of multiple linear regression analysis in Table 6 revealed that the  $F$  value (116.5985) obtained was significant concluding that all the twelve sub-dimensions together contributed significantly to the GDEI. The coefficient of determination ( $R^2$ ) was 0.9995 which revealed that 99.95 percent of variation in GDE was explained by these twelve sub-dimensions.

**Table 7. Path analysis of sub-dimensions of GDE with GDEI (n=180)**

Sl.No.	Sub-dimension	Direct effect		Total indirect effect		Largest indirect effect	
		Effect	Rank	Effect	Rank	Effect	Through variable number
1.	Participation	0.1094	1	0.8374	5	0.0938	12
2.	Influence and styles of influence	0.0961	4	0.8423	4	0.1031	1
3.	Decision making procedures	0.0695	11	0.8492	2	0.0972	1
4.	Task-functions	0.0935	6	0.8137	7	0.0877	1
5.	Maintenance function	0.0835	8	0.8292	6	0.0896	1
6.	Group atmosphere	0.0942	5	0.8550	1	0.1004	1
7.	Membership	0.0830	9	0.7913	11	0.0873	1
8.	Feelings	0.0865	7	0.7927	10	0.847	1
9.	Norms	0.0761	10	0.8079	9	0.0887	1
10.	Empathy	0.0961	4	0.7725	12	0.0862	1
11.	Interpersonal trust	0.1050	2	0.8127	8	0.0947	1
12.	Achievements of SHG	0.1013	3	0.8432	3	0.1013	1
	Residual effect	= 0.0004					

The path coefficient analysis was worked out to find the direct and indirect effects of the sub-dimensions on GDEI and results are presented in the table 7. It was obvious that the participation had the highest direct effect on GDEI followed by interpersonal trust, achievements of SHG, influence & styles of influence, empathy, group atmosphere, task functions, feelings, maintenance functions, membership, norms and decision making procedures. Another important finding was that all the sub-dimensions had their largest indirect effect through participation itself, whereas participation had its indirect effect through the sub-dimension achievements of SHG.

### CONCLUSIONS :

The study emphatically disclosed the deep rooted influence of Group Dynamics network among the farmer folk as influenced by their participation, influence & styles of influence, decision making procedures, task function, maintenance function, group atmosphere, membership, feelings, norms, empathy, interpersonal trust and achievements of SHG.

The findings of the study can serve as a practical manual for organising and managing SHG for group action and participation on a sustainable basis. The identified interrelationships between the variables can act as catalytic points for promoting action and group empowerment which might give useful insight on the feasibility of using the Group Dynamics network for indications on strengthening the working of these action groups.

### REFERENCES :

1. Fernandez, A.P. 1995, Self Help Groups:the concept. Mysore Rehabilitation Development Agency. p. 1-5.
2. Hersey, P. and Blanchard, K.H. 1995. Management of organizational Behaviour (6th ed.) Prentice Hall, New Delhi. p. 345-362.
3. KHDP. 1997. Fourth Year Work Plan of Kerala Horticulture Development Programme, Cochin.
4. Lewin, K. 1936. A dynamic theory of personality. Mc Graw Hill. New York, p. 30.
5. Lewin, K. Lippett, R. and White, R. 1960. "Leader Behaviour and Member Reaction in three social climates", In Group Dyanmics : Research and Theory (2nd ed.) eds. Cartwright, D. and Zander, A. Evanston, Ill : Row, Paterson & Company.
6. Pfeiffer, J.W. and Jones, E.J. 1972. Annual Handbook for Group Facilitators. Vol. 3. Pfeiffer & Company, San Diego, California. p. 19-24.

