Abstract
The intervention and role of farmer producer organizations has been acknowledged as crucial for upliftment of agrarian community who are facing various challenges such as decreased land holdings, globalization, unpredictable weather conditions due to global warming, less value realization of agro produce to name a few. Inspite of the government vision for these producer companies are in many places observed to be struggling. The sustainability and business viability of these producer companies are in doubt and hence it is believed that training intervention shall help them to overcome these problems by offering certain training interventions. This study is an attempt to identify the training needs and gaps in the existing training modules. It is observed that though the respondents have expressed their satisfaction regarding training intervention in areas such as post harvest technology and market led extension but at the same time the respondent training needs for productivity enhancement, socio economic sustainability, linkages, compliances and monitoring cannot be ignored and needs to be addressed. Further as revealed by the study more than the demographic attributes prior training experiences exert an influence on the training assessment and hence need to be considered while designing the appropriate training moduls.

I - Introduction
Only a minority of India's farmers is served by the formal agriculture extension system due to various limitations including the structural ones. Similar is the situation with the agriculture marketing. The loss at the farmers end is significant due to long supply chain. The APMC has not provided the required relief to the farming community; rather it has caused hindrances for the market forces to play freely in agriculture commodity market.

Producer Company: The PC is incorporated with the Registrar of Company. A PC is formed with the equity contribution by the members. The equity contribution of PC's differs from the cooperative in terms of one vote one member criteria. The day to day operation is expected to be managed by the professionals including Chief Executive officer, hired from outside, under the direction of the Board of Directors (BoD) elected by the General body.

Current status
There is very limited information at the moment about the number of PCs formed in various situations across the country and their performance. According to MSAMB number of PC registered in Maharashtra under different promoting agencies as on date 08/08/2016 is compiled and tabulated below

Key words: Farmers, Agriculture, Productivity, FPCs, climate
Table No. 1 List of Registered Farmer Producer Companies (FPCs) in Maharashtra (as on 08/08/2016)

<table>
<thead>
<tr>
<th>Promoting Agency / Project</th>
<th>Number of FPCs</th>
</tr>
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<tbody>
<tr>
<td>SFAC (Small Farmers Agribusiness Consortium)</td>
<td>67</td>
</tr>
<tr>
<td>MACP (Maharashtra Agricultural Competitiveness Project)</td>
<td>323</td>
</tr>
<tr>
<td>JFPR (Japan Fund for Poverty Reduction)</td>
<td>18</td>
</tr>
<tr>
<td>CAIM (Convergence of Agricultural Interventions in Maharashtra)</td>
<td>07</td>
</tr>
<tr>
<td>Other agencies (Nabard / NGOs / Self promoted)</td>
<td>358</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>773</strong></td>
</tr>
</tbody>
</table>

Source: MSAMB

**II - Organization of FPO/PC**

On an average each FPC caters to the agribusiness and extension need of 1200-1500 farmers for a cluster 20-25 villages. A professional management team of three-five persons provide handholding support to the BoD to carry out day to day operation. They also build capacity of the BoDs for governing function.

**Benefits to members**

- Timely and easily availability of fertilizers, seeds and other agriculture inputs at a reasonable rate;
- Bulk selling of agriculture produce for better price and to meet quality standards and formal market specifications.
- Extension services received by the farmers which the FPC had arranged with the agriculture department or from other service providers,
- Receiving cash dividends from the FPC.

**Current challenges of FPCs:**

The following are the major challenges faced by FPCs

a) Lack of mobilization of working capital and lack of support from financial support

b) Lack of Organization Management Capabilities such as administration and financial management.

c) Inadequate Business and marketing skills.

d) Registrations and statutory processes compliances are very cumbersome.

e) Insufficient knowledge of forward and backward linkages.

f) Lack of skilled human resource.

g) Lack of technical knowledge of package of practices for better production.

h) Significant gap in infrastructure facilities envisaged and actual.

i) Social and economic challenges in form of enterprising culture, literacy, stigma etc.

**Training Need Assessment**

(Sajeev and Singh, 2010)

- Training needs analysis is one of the crucial steps towards identifying the area of farmer's interest, design & development of curriculum that can be best suit to the existing real condition of the farmers.

Though ideally training need identification should be done internally Aghai (2012) pointed out that identification of training need often remains the responsibility of outside training operators. Effective training requires a clear picture of how the trainees will need to use information after training in place of local practices.

**III - Rationale of present study:**

FPO activities are beginning to be seen as a key way to deal with the development agricultural sector of numerous nations. FPOs can likewise improve access to markets and data. FPO approaches are contended to be significant for small scale farmers and agribusiness, as they empower them for improved access to investment, technology inputs and markets. Appropriately FPO advancement is a profitable instrument to boost agrarian enterprises in their region and help them connect to worldwide value chains in a more efficient and practical way.
In spite of the efforts by various Government agencies the Producer Companies have largely been facing numerous problems and challenges including the administration, legal compliances and lack of vision to execute the business plan. In order to ensure the sustainability of these Producer Companies which shall be the change agent it is vital that the stakeholders are trained according to the changing market paradigm. The study aims to understand the present training practices, their status and the perception of the stakeholders towards the content and key areas incorporated in the training program. Further an attempt is also made to understand the relative gaps in the perceived and present training areas which shall help the resource institutes, competent authorities and most importantly the PC's themselves in order to design and execute the appropriate training programs. Moreover a light is also thrown on the relative differences amongst the respondents not only according to their demographic characteristics but also according to their relative perception regarding the quality of training programs attended before.

IV - Limitation of the Study:
Within the limited time period available for the study, majority of MACP registered producer companies in operation in the Pune district could be covered. The small sample size is a critical limitation of this study. However through purposive sampling an effort has been made to include the respondents from diverse range of geographical area. Also since these companies are in operations for two years or less assessing their financial viability, particularly as a new type of institution is premature. However, within these limitations, the finding of the study should be useful for the development stakeholders and policy makers as a preliminary stock of the situation.

V - Literature Review
In his broad review of the contributions of the economics of information (Stiglitz, 2000) Suggests that only limited progress has been made in understanding how societies and communities such as farmer groups absorb and adopt to new information sources.

Factors that influence farmers use of information include personal characteristics such as age (Batte, 1993) education (Waller, 1998) and experience in farming (Schnitkey, 1992) business characterization such as market orientation of farming (Ngathou, 2006) farm size (Solano, 2003) (Alvarez, 2006) type of farm enterprise (Batte, 1993) debt Level (Tucker, 2002) and ownership of farm (Ngathou, 2006) and geographical characteristics such as distance to market centers (Solano C. H., 2003) and distance to nearest technological adopter (Llewellyn, “Information Quality and Effectiveness for More Rapid Adoption Decisions by Farmers.”, 2007.)

Published studies on farmer information needs and preferences are limited in India the NSSO 2003 Survey Showed that small and marginal farmers accessed less information and form fewer sources than medium and large scale farmers (Adhiguru, 2009) (Sajeev and Singh, 2010) Training needs analysis is one of the crucial steps towards identifying the area of farmer's interest, design & development of curriculum that can be best suit to the existing real condition of the farmers.

(Sajeev and Singh, 2010) Training needs analysis is one of the crucial steps towards identifying the area of farmer's interest, design & development of curriculum that can be best suit to the existing real condition of the farmers.

(Sajeev and Singh, 2010) Opined that farmer's training is directed towards improving their job efficiency in farming. Extension education is not just training for knowing more but to behave differently. That is to say, farmer who acquire training have to put it in practical use to bring out the best productivity as compare to the ones who had no training.

The study conducted by IFPRI, in 2005 show that net profits for farmers for contract farmers were more than double there of non-contract farmers in the case of dairy, 78% higher for vegetables (spinach), growing farmers, and 13% higher for peltry farmers. Costs of production for contract farmers were tower by approximately 21 percent in milk and 21 percent for vegetable compared with the non-contract farmers. The share of transaction and marketing cost in total costs was markedly lower for contract growers (Gulati etal 2009:9)
As (Onumah G., 2007) indicate, the formal Pos perform “bridging” function to organize relationships between the group and the outside world. Under the broad definitions (Producer) institutions play five potential role in strengthening market for commodities produced, bought and sold by small holders; reducing transaction costs; managing risks; building social capital; enabling collective action; redressing missing markets (M., 2011).

A.P. Patiletal (2014), in their study of Training need of dairy farmers in Nagpur district of Maharashtra, They randomly selected 15 villages i.e. 5 villages from each block i.e kalmeshwar, Hingana and Nagpur. The selection of animal management practices: Recommended practices viz; animal health and disease control, care and management, breeding and management, feeding management and clean milk production were selected for the study.

(S. BARMAN, 2013)The study reported that more than 70% farmer belonged to marginal category and remaining small and medium category of the out of twelve aspect, six aspect of rapeseed cultivation practices were considered as strong training area. The high training needs areas reported by tribal farmers were fertilizer management, (2.33), seed treatment (2.56), pest management (2.69), disease management (2.53), water management (2.6) and marketing (2.4). Based on the weighted mean scores, Pest management was ranked first followed by water management, seed treatments, disease management, and marketing and fertilizer management.

Marketing of produce attained as most priority in assessing the training needs of rapeseed crop (Chauhan, 2012).

JmAltschud (2010) suggest that the needs assessment be conducted in three phases: Preassessment activities assessment activities and post assessment activities.

Though farmers mobilization and donor support is important to create farmers companies, capital investment is needed for a scale up and to allow the business to move forward, which can come from social investors and venture funds. Equally important is the support provided by promoters in terms of market outlets, in creation of market for products and communicating the differentiated messages like sustainability or fair trade or farmers ownership(Sukhpal Singh, 2013).

Producer Companies can develop into business hubs for retailers and input suppliers and yet they play a limited role in super market supply chains in India(Trebbin, 2014).

In this environment of greater instability and competition, organizational and collective action can help to enhance farmers competitiveness and increase their advantage in emerging market opportunities. We build on the ideas of value chain governance and collective action literature and introduce the functions and organizational structures of producer companies in India.(Trebbin & Hassier, farmers Producer Companies in India: a new concept for collective action?, 2014)

VI - Statement of Research Problem

As the present study deals with finding out with problems before members of Farmer Producer Organizations and Producer companies which shall ultimately be resolved through systematic and scientific training of its members, elected representatives and staff members. Hence the problem in the present study can be coined as follows

“What are the training needs of farmer-member and Board of Directors in farmer producer organizations and Producer companies so that they can contribute effectively to the development of their FPOs.”

Objectives of the study:

1) To understand the training practices adopted and association of such practices with the trainee attributes.

2) To study trainee perception towards benefits of present training practices in functional and technical skill enhancement and discern such perception level according to demographic and training attributes.
3) To understand the training need relevance perceived by the members and in various technical and functional domains of PC Management and discern such relevance according to demographic and training attributes.

4) To suggest measures for addressing the gap identified between the actual and expected training need areas.

VII - Research Methodology

Research Design:
Type of study: Descriptive
Sampling Unit: Board of Directors and Farmer Members
Sampling Frame: Registered FPO and PC member directory
Sampling Technique: Convenience sampling

Sample Size:
Table No-2

<table>
<thead>
<tr>
<th>S.N.</th>
<th>Profession</th>
<th>Population</th>
<th>Sampling Method</th>
<th>Selected samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>FPO Members</td>
<td>9800</td>
<td>Convenience Sampling 33% of population</td>
<td>200</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>250</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Farmer members: The representative numbers of members 200 is also covered in the study. The method of selection was convenience sampling

Data collection Instrument
A structured closed ended questionnaire were used for recording the responses of respondent. The questions included multiple choice questions, dichotomous questions and also questions based on a 5 point Likert scale.

Statistical Techniques:
The various statistical techniques like Chi-square test, percentile method have been used for the analysis, testing the set hypothesis in this study. Cluster analysis, Factor analysis is used to classify the various attributes. Factor analysis was briefly used to classify the training needs in correlated groups according to their perceived relevance. Correlation statistics including chi Square, Kruskals lambda were used to explain correlation between various demographic variables and strength of such relationship.

Sources of data collection:

Secondary Data:
Extensive use of library has been made and referred various reports by Government agencies such as MACP, ATMA, SFAC, ADB, MSAMB are included. National and International Management Journals, work of other research scholars and internet sources including electronic database such as EBSCO etc are referred.

Primary Data:
1) Research Technique: Survey Method
2) Survey tools: Questionnaire method

HYPOTHESIS
The present study is guided by testing of the following hypotheses:

Hypothesis related to training objectives

H₁₀: There is no significant difference among the FPO members regarding the relevance and ranking of training objectives in functional areas amongst FPO members as per their socio demographic and training attributes.

H₁₁: There is significant difference among the FPO members regarding the relevance and ranking of training objectives in technical areas amongst FPO members as per their socio demographic and training attributes.

Hypothesis related to utility of training programs

H₂₀: There is no significant difference among the FPO members regarding the utility of training objectives in functional areas amongst FPO members as per their socio demographic and training attributes.

H₂₁: There is significant difference among the FPO members regarding the utility of training objectives in technical areas amongst FPO members as per their socio demographic and training attributes.
Hypothesis related to gap in present and expected training focus areas

H_{01}: There is no significant difference among the FPO members regarding the gap in present and expected training in functional areas amongst FPO members as per their socio demographic and training attributes.

H_{02}: There is significant difference among the FPO members regarding present and expected training in technical areas amongst FPO members as per their socio demographic and training attributes.

Hypothesis related to gap in present training provided by Resource Institutes

H_{01}: There is no significant difference among the FPO members regarding the training provided by Resource Institutes in functional areas amongst FPO members as per their socio demographic and training attributes.

H_{02}: There is significant difference among the FPO members regarding training provided by Resource Institutes in technical areas amongst FPO members as per their socio demographic and training attributes.

Hypothesis related to level of awareness of BoD

H_{01}: There is no significant difference among the FPO members regarding opinion about awareness level of BoD in functional areas amongst FPO members as per their socio demographic and training attributes.

H_{02}: There is significant difference among the FPO members regarding opinion about awareness level of BoD in technical areas amongst FPO members as per their socio demographic and training attributes.

VIII - Major findings of the study

The major finding and conclusions are categorized into following main four parts.

a. Presently the training programs are organized for members and BoD

b. Perception about content and relevance of existing training programs by FPO and BoD
c. Association of Relevance of training and attributes of FPO members with the training objectives

Part A:
AI: Present status of training efforts at FPO level.

- The mean age of the sample respondents is 39.73 which is almost 40.
- It can be inferred that in spite of government efforts to encourage women participation in FPO affairs to empower them the number of women members in FPO is far below expectations and moreover their participation in the FPO affairs would be further case of question.

- The total number of respondents who are fairly educated constitute around 63% of the sample which is quite satisfactory.
- 96% of the respondents are aware of the objectives laid down by the FPO which further may underline the fact that most of the FPO members are aware and convinced about the benefits of joining FPO.

- 82% of the respondents have admitted that their FPO or PC of which they are member, provide training or organizes training.

- 76% of the respondents replied that the training program organized by their respective FPO and PC is occasional. From the above it can be inferred that though a majority of FPO organize training for their members such trainings are occasional and not regular. Also this indicates the appropriate need based training modules are not planned by FPO. Moreover this underlines the fact that the planning of training program is not systematic in many of the FPO's.
75% of the respondents reported that the objective of the training program attended by them was to encourage package of practices for better production among the respondents regarding the objectives and functioning of FPO and PC.

52% of the respondents felt that the objective of the training program attended by them was to help members improve market linkage which could contribute in obtaining proper prices.

54% of the respondents felt that the objective of the training program attended by them was to minimize post-harvest losses and improve the quality of the produce by focusing on capacity building through forward linkages.

70% of the respondents reported to attend one or two training program as FPO members in the past 2 years

15% of the respondents rated the quality of training program attended by them as excellent whereas 36% and 26% reported the same as very good and good respectively.

84% of the respondents report that the opinion of employee or the trainee is solicited before organizing a training program which further highlights the participative management practice of the FPO.

53% of the respondents report that the FPO and PC’s of which they are members are passive towards training and do not do substantial efforts regarding training and development initiatives. 25% and 22% of the respondents report that though the FPO and PC’s of which they are members are active in training of members and staff the training efforts do not produce desired results respectively.

In summary the respondents perceived package of practices for better production, minimizing post harvest losses as some of the of the important objectives of training program attended by them.

A2: Relative Relevance of Training Objectives

The highest number of respondents ranked “package of practices for better production” about FPO management as the most relevant training objective as compared to other training objectives.

The least relevant training objective as compared to other training objectives which is ranked last is “Aggregation”

The training objective which secured second rank by highest number of respondents was “minimize post-harvest losses”.

A3: Ranking of Training in technical (farm related) areas according to their relative relevance by the FPO members.

39% of the respondents ranked water management as one of the most relevant area for training where as 18% and 14% respondents ranked it on second and third place respectively.

22% of the respondents ranked crop based training for better production as one of the most relevant area for training where as 15% and 14% respondents ranked it on second and third place respectively.

4% respondents ranked seed quality, seed treatment and procurement in the initial phase as most relevant area of training.

10% of the respondents perceive training on market led extension as most important as compared to other training objectives.

14% of the respondents rank training regarding Custom hiring and inputs purchase) as most important as compared to other training areas.

6 % respondents ranked organic farming training objective as the least relevant among all the training objectives.
13% respondents ranked Government interventions as least relevant from all objectives of training.

Only 2% of the respondents rank training regarding dissemination of information through IT for branding as most important as compared to other training areas.

In summary it can be concluded that water management and crop based training for better production receives highest relevance amongst all types of training areas. Further information dissemination of IT receives the least preference amongst all training objectives.

**A4: Training Organised by FPO in Business functional (fpo related) areas**

- The highest percentage of respondents who have reported a particular type of training organized by their FPO pertains to (Financial services) followed by Market Linkages and Business planning related training.

- The functional area which highest number of respondents reported training not organized is custom hiring.

**A5: Ranking of Training in business functional (fpo related) areas**

- 40% of the respondents perceive training in financial services area to be most important as compared to training in other functional areas.

- 16% of the respondents perceive training in marketing and backward linkages area to be most important as compared to training in other functional areas.

- 12% of the respondents perceive training in Business planning area to be most important as compared to training in other functional areas.

- 17% of the respondents perceive training in supply chain area to be most important as compared to training in other functional areas.

- 5% of the respondents perceive training in input supply services area to be most important as compared to training in other functional areas.

- 6.5% of the respondents perceive training in procurement/custom hiring and packaging to be most important as compared to training in other functional areas.

- 2.5% of the respondents perceive training in networking and Branding to be most important as compared to training in other functional areas.

- 1.5% of the respondents perceive training in insurance services to be most important as compared to training in other functional areas.

In summary it can be inferred that the training area perceived to be most important and securing either first or second place by maximum number of respondents is “financial services” followed by marketing and backward linkages and business planning. The training area perceived to be least important and securing either last or second last place by maximum number of respondents is “insurance services”. Moreover the respondents have reported that training in these areas are organized by their FPO’s.

**A6: Deficiency in skills as perceived by FPO members.**

- 44% of the respondents feel that the FPO employees lack in Technical skills which are basically related to farm activity management such as water management, crop based training to name a few.

- 37% respondents report that the employees lack in functional skills such as administration, financial management etc. whereas only 25% of the FPOs members feel that the employees of their FPO’s lack in legal, statutory compliances skills.

**A7: Enhancement of skills through training.**

- 46% of the respondents feel that the FPO employees lack in Technical skills of the FPO employees can be enhanced through training.

- 34% respondents agree that in functional areas skills should be enhanced.

- Only 22% of the FPO members feel that the legal skills of employees in their FPO’s can be enhanced through training.
4 types of variables are extracted which can be coined as follows

- Group I: Produce Marketing
- Group II: Strategic Planning or Management of the Company
- Group III: Forward & Backward Linkages
- Group IV: Financial and accounting literacy

**C1: Association of Training-demographic attributes and Relevance of Training in Functional areas**

- Age, education, number of training program attended by respondents, quality of training program and content of training program are significantly associated with training objectives.
- Further all the variables such as age, education, number of training program attended by respondents, quality of training program and content of training program have significant ability to predict the regression scores obtained by factor analysis regarding the training objectives.

**C2: Association of Training-demographic attributes and Relevance of Training in Technical areas**

- The occupation of respondents, number of training programs attended, perception towards quality of training program attended has significant relationship with the regression score of technical training objectives. All the variable occupation has a significant relationship with the regression score of factors it has no significant ability to predict the score.
IX - Conclusions

As observed from the responses of members, Board of Directors, staff and stakeholders of the FPO and further reports from various authorities such as MACP, NABARD, SFAC, ATMA to name a few regarding problems and prospects of Producer Companies could be stated as follows:

Problems before FPO:

- Lack of Professionalism in PC Management and administration
- Board of Directors Meetings: Regular but minutes are not being prepared professionally and not submitted to RoCs.
- Annual General Meeting: Only few have conducted AGM after PC incorporation. As per rule 1st AGM should be within 90 days of registration and its minute should reach to RoC.
- Share Transfer: Share transfer process is going on in major cases but process is slow. Some FPOs have been fined for late allocation of shares and for not informing RoCs.
- Licenses for selling agri Inputs: Majority FPOs have applied for it but pre requisite of degree in agri for license holder (as per central govt guidelines)
- Working Capital: All FPOs need working capital in the range of Rs 5 lakhs to 20 Lakhs. Banks are asking 3 years audited balance sheet. There is an urgent need to solve this problem.
- Market linkages: Direct Market License is required to smoothen procurement for export and processors
- ATMA officials and AMEs need to train on inputs licenses, Direct Marketing licenses rules and regulations. Govt can remove compulsion of solvency certificate (which is required under DML for FPOs) under ease of doing business.
Gaps in training areas

It is observed that package of practices for better production, minimizing post harvest losses, water management, crop based training, financial services, marketing and backward linkages are major areas where training intervention is needed by the respondents.

Further the “financial services” followed by marketing and backward linkages and business planning receive important ranking as per their felt training relevance.

Moreover the grouping of training needs based on the various classification levels is as follows

I. Based on technical and functional domains

Group 1: Productivity Enhancement
Group 2: Extension

II. Level of satisfaction regarding training assistance

Factor 1: Post Harvest Interventions
Factor 2: Strategic Market led extension Interventions.

III. Critical areas to be covered for training and capacity building of BoD.

Group One: Socio-economic sustainability Training Intervention
Group Two: Networking
Group Three: Compliances & Monitoring

In summary it can be concluded that though the respondents have expressed their satisfaction regarding training intervention in areas such as post harvest technology and market led extension but at the same time the respondent training needs for productivity enhancement, socio economic sustainability, linkages, compliances and monitoring cannot be ignored and needs to be addressed. Further as revealed by the study more than the demographic attributes prior training experiences exert an influence on the training assessment and hence need to be considered while designing the appropriate training moduls.
X - Suggestions

In the light of above results it is worthwhile to suggest that-

1. There is a strong need for orienting the bureaucracy and NGOs on the salient features and the provisions of the PCs. Special notification may be provided for the CA Chartered Accountant on the provisions of producer companies with respects to filing returns. Need for continuous and regular hand-holding support to the officials of PCs at least for initial 2-3 years to familiarize the functionaries on maintenance of financial record, filling returns etc.

2. Convergence of SFAC scheme: Need convergence of equity grant scheme. It may help FPOs for working capital. Special allocation of funds for Maharashtra under this scheme and further submission of proposals of FPOs should be made on campaign basis.

3. Possibilities of partnership among the PCs are to be explored Depending on the size and scope of needs assessments one can create a useful plan for identifying needs.

4. There is a need of stimulation by Government agencies to coordinate the efforts for FPOs or PCs like promoting Branding, Need based training programmes, after Inception all types of support, strengthening the linkages for a successful economically viable venture.

5. FPOs /PCs may be incorporated in Government initiatives like start-ups and Skill Development programmes thus may be treated as 'Startups' for exemption of tax and other benefits special academic Institutes for capacity building of FPOs and Pcs.

References


### About Author

**Mrs. Preeti Sawairam:**

She has done MSc, from Rahuri Krish Vidyapith, Rahuri, now pursuing her PhD at the PIRENS Research Centre, Loni Bk, which is affiliated to Savitribai Phule Pune University, Pune. Presently rendering her services to Govt. Of Maharashtra as a Technical Officer, JDA office Pune, Department of Agriculture. She has published many research articles in reputed journals.

Email: preetis2015@yahoo.com