# MobiMOOC – A practical learning tool to promote corporate literacy for effective functioning of Farmer Collectives

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Agriculture is the primary source of livelihood to more than 70% of rural households in India. Of the total farmers, 87% are small-holders with less than two hectares of land. Yet they play imperative role in agriculture development and poverty reduction. They face constraints to adopt technologies, access credit services, buy inputs, get market links and achieve economies of scale. As a mitigation measure, in the recent past, Indian government has adopted development of Farmer Producer Organization (FPO) to collectivize farmers with the core objectives of doubling farmers income by reducing production cost, improving productivity, strengthen participation in value-chain and foster business principles. As on date 10,000 FPOs are formed in India with an average 700 to 1000 shareholders and registered under company's act. However, there has been gaps and challenges in securing active participation of the share-holders in contributing in business. The recent impact study conducted in the state of Maharashtra pointed out that FPOs resulted in rise in price realization among 22% of members and 28% accessed inputs at lesser cost. Although results are encouraging, promoting participation of all members in business transactions is crucial to growth of the company. The main barriers are limited understanding among shareholders about their roles, responsibilities, rights, operational structure and governance of the organization. Members perceive the FPO as one more collective and thus they miss to connect the corporate dimension in their organization. Thus, promoting continuous learning among shareholders and leaders about the above listed issues is necessary for their active participation in the company activities and achieve successful business.

In this backdrop, a corporate literacy course was designed and piloted using MobiMOOC digital tool with 24 FPOs from five districts, having average shareholder base of 1035, in Tamil Nadu, India. Contents are prepared based on the learners needs assessment conducted and categorized into blocks, divided into units and chunks. The contents were disseminated to farmers as voice calls in simple mobile phones with options of retrieving (IVRS) and listening when convenient to individual farmers. In this paper we will discuss the experiences of pedagogy adopted, design and dissemination of contents, feedback of learners on how it supported in gaining and knowledge on FPOs and how they practiced the learning in their FPOs businesses and its impacts. The paper will also touch up the scope for replication of the learnings.

### Introduction

The Government of India's focus on doubling the farmers' income mediated the shift in policy focus from 'food production' to 'farmers' welfare'. As a result, farmer-centric policies have been given due attention. In India, 87% are small farmers holding less than 2 Ha land and operating nearly 44% of the total land under cultivation. Given the context of higher proportion of small holders, to improve their competitiveness in accessing productive resources and services,

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Farmer Producer Organizations (FPO) is recognized as better strategy. Studies have also proved that FPOs reduced the role of middlemen (Fafchamps and Hill, 2008), improve farmers participation in markets (Stockbridge et al., 2003), price realization through aggregation and value addition (Singh 2008; Kanitkar 2016, NABARD 2019). The recent evaluation study of Price waterhouse Coopers on the performance of Maharashtra Agricultural Competitiveness Project have shown that FPOs have helped to increase price realization of its shareholders by 22%, Incidence of cost of marketing is 31% lower than other channels and 28% of shareholders have purchased inputs from FPOs which accrued the net savings of 50 USD per Ha.

Till now 10,000 plus FPOs have been promoted and Govt. of India targeted to promote additional 10,000 FPOs within 2027-28 with a budget allocation of 980 million USD. This show that in India, now the small farmers development process has evolved into FPO movement and almost all of them are registered under Farmer Producer Company's Act.

The study on FPOs capabilities and performance have pointed key issues such as low paid up capital, inadequate capacity to analyze business potentials, weak governance and compliances, sub-scale in business operations, extending services to all the members, very low active members contribution to the business of the company (Govil, 2018 and Govil et al., 2020). These key issues stem primarily from limited knowledge and understanding among the shareholders and board of directors about the FPCs and its objectives, shareholders rights, roles and responsibilities, active participation and contribution to the business of the company, important services offered by the company, operational norms and governance of the organizations. They perceive FPOs as one more community-based organization evolved to work with them, many of them expressed that it is yet another association or federation of group members to promote collective actions. Hence, fostering learning among shareholders on the above themes are imperative to boost their participation and ensure ownership. However, considering the scale and the intensity, an appropriate pedagogy is needed for its effective reach in building their capacities to act.

Mobile based Massive Open Online Learning method has been demonstrated as a potential pedagogical method to reach such informal learners. It has been shown that it is a low-cost delivery method over simple phone covering any number of farmers at a time (Kiran Yadav, 2015).

## **Methodology and Process**

The course was implemented with a partnership with a network of 24 farmers association in Theni, Dindigul, Madurai, Virudhunagar and Karur districts, in the state of Tamil Nadu, India who acted as course facilitators. The L3F partners of COL, Vidiyal NGO from Theni district worked with FPOs in three districts (Theni, Madurai and Virudhunar) and Reddiarchatram Seed Growers Association (RSGA) a farmers' Association based in Dindigul district worked with FPOs in two districts (Dindigul and Karur). The first course was conducted between 1 Oct 2019 to 15 Nov 2019 and enrolled 2493 learners.

Initially to mobilize the men and women learners and to create an awareness about the course among the learners, district wise orientation meetings was organized to discuss the objectives,

MobiMOOC technology and delivery of the course. A detailed toolkit on operationalizing the MobiMOOC course was prepared and shared with the facilitators to improve their understanding on the course. In turn, they have conducted 20 sensitization and awareness meetings for the shareholders with the support of the 10 facilitators in clusters. A need assessment was conducted among 20% of the total learners through Focus Group Discussions (FGD) to understand their specific needs on knowing more about FPO's. A detailed check lists were prepared and shared with the facilitators and explained the process of conducting the FGDs and documenting the key points.

Simultaneously to mobilize the learners, modern ICT tools like mobile networks and social media like Whatsapp groups were formed to strengthen the awareness initiatives. In addition, a hand out in vernacular language with step by step details about how to operate the mobile phone to activate, navigate and participate in the quiz etc was printed and distributed to each learner. Also, a poster was printed with details about MobiMOOC project with contact numbers of facilitator were given to each learner to reach if they need any clarification or further support. The other approach adopted was meeting the learners individually or as a group and demonstrated how to activate and join in the course and how to continue in the course to enjoy the full benefits. Following this, a gender segregated list of learners who are interested to join the course was prepared.

A course design workshop was organized and discussed the implementation plan with the technical support of Indian Institute of Technology, Kanpur, India. The main contents for the course are primarily about what is an FPO and the important roles, responsibilities and duties of the shareholders, the benefits and services the shareholders could receive from the FPOs and third important aspect is about the importance of business plan and FPOs supporting the shareholders to sell their farm produce. Lessons were prepared using the relevant information gathered from the book on "Farmers Producer Organization: Frequently Asked Questions", prepared by National Bank for Agriculture and Rural Development (NABARD, 2015).

The course was structured into six modules on the above-mentioned areas of importance (given in Annexure 1) and 33 lessons; the total duration is around 45 minutes. The audio lessons were shared with the Indian Institute of Technology (IIT), Kanpur, the lessons were uploaded and a text message was sent to all shareholder enrolled in the MobiMOOC course with a toll free number to activate and start the course. It is expected the farmers can hear one lesson in a day. The inbuilt IVR facility helps the learner to navigate for repeated listening of the same lesson, go to the next lesson if the learner is interested, or the lessons in the previous chapters or in the next chapter, ask for clarification or more information, and also to participate in the quiz etc. A quiz was released 10 days before the course was completed. A Mobile app was also developed for the course, those who have smart phones can refer the contents when needed.

The content prepared was shared with the district development managers of NABARD in both the districts, and selected FPO leaders. Feedback received about how to make the contents more farmer friendly, style need to be used, priority of topics for the learners, duration of each lesson, how much each lesson is important etc., helped to improve further and finalize. The finalized texts were converted in to audio messages with the support of an experienced dubbing

artist in an audio studio, this process helped to ensure the quality of the lessons prepared in audio format. The lessons are in colloquial style and dialog mode for easy understanding of the farmers. Each lesson is for around one minute, only a few exceeded the duration of one minute.

The delivery of the lessons was carried out through a technology based on Interactive Voice Response and Speech Recognition (IVRS) to disseminate audio lessons to the users through voice call. The learning materials was sent in audio to the learners and it aimed to cover large number of semiliterate and illiterate shareholders of the FPOs, particularly the women shareholders who cannot attend any regular conventional training programmes.

A project management committee representing members from partner organizations was formed. The monthly review meetings were conducted to assess the progress, carry out the mid-course corrections and evolve strategies to follow up with the learners. Besides, to conduct pre and post evaluation of the project results as well. A baseline in September 2019 and endline assessments in February 2020 were done to understand the effectiveness of the MobiMOOC in increasing the knowledge of the learners about the corporate literacy. At the end, certificates were awarded to the learners who had completed the course.

### **Results and Discussion**

The outputs of MobiMOOC course interms of active members, their age, gender profiles are analyzed first. The total learners enrolled were 2493, of which 49.6% are male farmers and 50.4% are female farmers. The course has recorded that 50.4% of the enrolled members as active learners. Among the total 1257 active learners, 50.5% are male farmers and 49.5% are female farmers. Regarding the age group of the enrolled farmers 21.1% of farmers are above 50 years, while 18.6% are under 36 to 40 years and 16.2% are 41 to 45 years. Among the active learners, 22.8% above 50 years, 17.2% are 36 to 40 years and 16.6% are 41 to 45 years. Apart from regular listening, 311 queries were received in the forum. The instructors answered to only 53 questions, since most of the questions were totally irrelevant to the theme and in several cases, there is no recorded voice was not available. 327 learners have submitted quiz which shows their active participation in the learning process. Also, 62% of the active learners have completed the course and received the certificates.

As an outcome of the course, at the first level there has been changes in the members level on their knowledge about the FPOs, which positively impacted in members participation and ownership on the FPO's operations.

The following case stories shows the learners quick feedback on how they felt immediately after participating in the course. Ms. G.Hemashri, female farmer from Koduvilarpatti village in Theni, belongs to Tamil Nadu Sustainable Rural Livelihood Mission(TNSRLM) expressed that "I really learned two things, one is about how farmers can come together as a team to do direct marketing of the agricultural produce and the other is how it is important for a company to manage its finance". While Ms. T.Saravanavalli, female farmer from Kallnai village, Madurai district from TNSRLM promoted FPO shared that "my understanding about company has improved and clear now, I know about how a company works and my roles and responsibilities as a shareholder, and also how the company can help the farmers to do marketing the produce without taking the support of middlemen". The male farmer Mr. Thangapandi, from N.Andipatti village in Dindigul district, as a shareholder of Kadavakurichi Sustainable Farmers Producer

Company told that "The lessons were very useful, particularly about marketing the produce, where to sell, how to sell etc, now I believe the company will help me to get higher price the produce". Similarly, Mr. Kalaiselvan, male farmer from Pudupatti village in Dindigul district, Reddiarchatram Sustainable Agriculture Producer Company Ltd. narrated that "It really helped the shareholders to know about the roles and responsibilities now we expect active participation of the shareholders in the company activities, this will help for the good performance of the company management.

At the next level, the learnings have been reflected in the members performance in the company's performance. On an average there has been 28% increase in shareholders access to input services offered by the company from the base line of 16%. While it is 100% for the financial linkages with banks for accessing credit services across the FPOs promoted in the five districts. In addition, shareholders active participation in the group meetings and board of directors meeting has been enhanced along with changes in the quality of the discussion in the meetings. Most importantly, 33% increase in access to market services has been recorded which was only 14%. Although the current level of participation is not fully sufficient to generate business, the experience and linkages with service providers has been tested and fine-tuned.

## Key challenges

The main challenges faced by the learners are periodically reviewed by the facilitators and resolved in the monthly group meetings. The important ones are

- ✓ One of the service providers have started charging for the talk time. Hence farmers stopped using their phones to listen the lessons. Later it was discussed in the group meetings and they started using different service providers.
- ✓ About 36% of the learners, particularly the illiterate farmers missed the calls, because the course was not activated in their mobile phone. They missed to see the first text message informing about the course for activation. Some of the illiterate farmers never see the text messages. Those who missed the text message and those cannot read the messages need the help of a supporter to start the course.
- ✓ Most of learners are not used to the practice of navigating and utilizing the different services offered, hence they couldn't enjoy the full benefits of the course.
- ✓ When the course was conducted, it was a busy agricultural season hence the farmers are busy in the field, the facilitators could not meet the enrolled learners and many farmers forget to listen the lessons regularly on daily basis, since they are not used to such learning.

## **Concluding Remarks**

From the intervention it is evident that shareholders knowledge about the FPOs are crucial for their participation in accessing different services offered by them. Also, MobiMOOC is found to be an appropriate learning tool for the farmers provided it adopts the process-based approach. The process starts with the social mobilization, awareness creation, need assessment, course designing, content preparation and rolling out the lessons. While in the process, periodic review and assessment of learning status helps the facilitators to intervene and address the challenges faced by the learners. Considering the advantage of the MobiMOOC course in facilitating the knowledge among shareholders to strengthen their contribution to the business of the company, the FPO promoting agencies like NABARD, Tamil Nadu Small Farmers Agri-Business Consortium etc can be trained to upscale the course with FPOs that they have been promoting.

#### Annexure 1

## Six modules identified for the course

What is a Farmer Producer Organization (FPO)	8
Benefits of FPOs	2
Roles and responsibilities of shareholders	8
Roles and responsibilities of company Directors	5
What is a business plan and how to prepare a business plan	5
Support of NABARD and SFACs for FPOs	5

### References

Govil, Richa. 2018. "Agricultural Livelihoods: Need for Re-imagination"." In State of India's Livelihoods Report 2018, ed. by Narasimhan Srinivasan. ACCESS Development Services.

Govil, Richa, Annapurna Neti and Madhushree R. Rao. 2020. Farmer Producer Companies: Past, Present and Future. Azim Premji University, Bangalore.

Kiran Yadav. 2015. MobiMOOC - a massive open online course on horticulture - an effectiveness study, Uttar Pradesh State, INDIA <a href="http://oasis.col.org/bitstream/handle/11599/574/MobiMOOC%20on%20Horticulture-Process%20Documentation.pdf?sequence=4&isAllowed=y">http://oasis.col.org/bitstream/handle/11599/574/MobiMOOC%20on%20Horticulture-Process%20Documentation.pdf?sequence=4&isAllowed=y</a>

NABARD. 2015. "Farmer Producer Organisations: Frequently Asked Questions (FAQs)." NABARD. Accessed January 7, 2020. https://www.nabard.org/demo/auth/writereaddata/File/FARMER%20 PRODUCER%20ORGANISATIONS.pdf.