

#### FARMERS PRODUCER COMPANY- FOR QUALITY RICE SEED PRODUCTION IN ASSAM

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# ABSTRACT

Rice is the major food crop cultivated in Assam. Rice productivity in Assam is significantly lower than the national average owing to many reasons among which lack of availability of quality seeds of high yielding varieties is the major one. Since the high genetic purity seeds produced by the government institutes in the state are too meagre to meet the huge demands, the concept of farmer seed Producer Company is being proposed. At present, only one farmer producer company for paddy is operating in the state, but the number of FPCs for paddy needs to be increased. How efficiently the concept of FPC for quality rice seed production can be adopted in the state of Assam is discussed in this paper. With the technical inputs from government institutes like ICAR-Regional Rainfed Lowland Rice Research Station- Gerua and Assam Agricultural University, the farmers of the state themselves can produce the required rice seeds. This will not only ensure the timely availability of quality rice seeds of the improved varieties, but will also help in the long term to achieve the proposed target of doubling the income of rice farmers in the state.

Key words: Rice, Farmers Producer Company, quality seed, improved varieties, income

# Introduction

Agriculture is the major source of income for families in India. Rice is the staple diet for about 65% people and cultivation of rice is the main occupation of those engaged in agriculture. It is a share of nearly every meal, and it is grown on a most of the rural farms. India is the second largest producer of white rice in the world. It contributes about 43% of total food grain production and 46% of total cereal production in the country. In Assam rice occupies about two-third of the total cropped area in the state. The state experiences plenty of rainfall and possesses a fertile land which is extremely advantageous for paddy cultivation. This has led to the flourishing growth in food crops and staples in Assam agriculture (Islam, 2012). Assam comprises of four physiographic divisions: Brahmaputra Valley (Indo-Gangetic trough); Karbi Anglong (a part of Meghalaya plateau which is an outlier of Peninsular India); North Cachar hills (belongs to extra-peninsular mountain and Barak valley (extension of Surma valley).

Assam covers an area 78,438 Km<sup>2</sup>. i.e. 2.39% of total geographical area of India and bears 2.59% of total country's population, according to 2001 census. However, the percentage of population below poverty line in Assam is lower than the all India average, which is 19.7% as against 21.8% in India, Assam uses 35.06% of total geographical area as net sowed area as per the data available during 2005-06. The average size of holdings in Assam is relatively smaller (1.5 hectare) than the national average (1.32 hectare). Moreover; the distribution of operational holdings in Assam is mostly skewed with the concentration of almost half of the holdings (45%) in the lowest size class of below 2 hectares. It is said that seed fertilizer technology is scale neutral, but too small a holding size renders adoption of modern

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agricultural operations economically unviable (Sharma and Sharma, 2015).

Paddy, which is the dominating module of the crop rotation consists with three distinguished crops, relating to the harvesting seasons, they are autumn rice, winter rice, and summer rice. Of these three, again winter rice has the upper hand over the two so far the rice pattern is concerned. However, the contribution of summer rice in terms of area, productivity, and production has shown an improvement over the two. However, as a whole, winter rice remains as the major rice cultivation (above 70%) of Assam. The area under winter, summer and autumn paddy were 18.59 lakh ha, 3.99 Lakh ha and 3.13 lakh ha respectively (2010-11). The average productivity of winter, summer and autumn paddy were 1993, 2577 and 1155 kg /ha respectively (2010-11). While in 2006-07 autumn rice had the contribution of 17.31%, winter rice had 68.43% and that of summer rice had 14.2%. However the overall rice productivity of Assam is 2.134 t/ha which is far below the national rice productivity (2.7 t/ha).

#### 1. Constraints in Rice Production in Assam

The main constrains of rice productivity in Assam is identified as below.

- Lack of quality seed material.
- Natural disaster- mainly flood and periodic droughts
- Lack of mechanization
- Inadequate storage and processing
- Unorganized market
- Inadequate service delivery mechanism
- Extremely limited irrigation facility
- Technology shy farmers

Among these, non-availability of quality seed of high yielding variety is the main limitation in productivity of rice in the state. It is estimated that the direct sharing of quality seed alone to the total production is about 15 - 20%. However, good quality seed of the new improved rice varieties, which the farmers

prefer to grow must be available at the time of sowing. Unfortunately, seeds of desired varieties are mostly in short supply, often reaches the farmer after the sowing season or even sometimes duplicate seeds are provided. There is a need to identify widely-grown varieties and its seed requirement for the next 3-4 years. Though Regional Rainfed Lowland Rice Research Station (RRLRRS)- Gerua, Assam (Table 2) and Assam Agriculture University-Jorhat have been providing breeder/foundation/truthfully labelled seed to ASSCA/Assam Corporation the Seed (ASC)/Private agencies/Progressive farmers in time but the requirement of high quality seed is far above than what these two centres could do. Considering the fact, Seed Village Concept can be implemented by Farmers Seed Producer Company for production and marketing of seeds of pure high yielding, certified/authentic rice varieties for the registered growers/farmers in time.

## 2. Farmers Producer Company (FPC)

Farmers' producer companies can be taken as hybrids between private companies and cooperative societies. The producercompany concept is planned to combine the efficiency of a company with the `spirit' of traditional cooperatives. Producer companies aim to integrate smallholders into modern supply networks-minimizing transaction and coordination costs, while benefiting from economies of scale (Lanting, 2005). They are run and owned by farmers, financially facilitated by the government or donor agencies, and managed by professionals. The concept of producer companies is still in its infancy in the agricultural sector and has captured almost no attention in the literatureparticularly outside India.

1. The objective of the concept of FPC is to organize farmers into a collective to improve their bargaining strength in the market.

- **2.** They are owned and governed by shareholder farmers (or artisans) and administered by professional managers.
- **3.** They adopt all the good principles of cooperatives and the efficient business practices of companies and also seek to address the inadequacies of the cooperative structure.
- 4. A Farmer Producer Company can be formed by any 10 or more primary producers or by two or more producer institutions, or by a contribution of both. They can undertake activities related to production, harvesting, grading, procurement, pooling. marketing, processing, etc., of agricultural produce.
- **5.** Non-producers seeking to invest in these companies as shareholders are precluded under the statute concerned.
- 6. The Farmer Producer companies have democratic governance, each producer or member has equal voting rights irrespective of the number of shares held. There is a limitation on the amount that can be distributed as dividend. Profit is mainly distributed on the basis of "patronage", which acts as a reward for members contributing to the business. There can be 5-15 directors and expert directors can be coopted for professional guidance.

Some of the successful Farmer Producer Companies working in the field of agriculture and allied sectors are listed (Table 1).

S. No.	Name of Farmer Producer Company (FPC)	Produce	District	State
1.	Longai Fish Producer Company Ltd.	Fish	Karimganj	Assam
2.	Aadrika Milk Producer Company Ltd.	Milk	Bongaigaon	Assam
3.	Bhaktardova Milk Producer Company Ltd.	Milk	Barpeta	Assam
4.	Neularvita Fish Producer Company Ltd.	Fish	Barpeta	Assam
5.	Silarai Milk Producer Company Ltd.	Milk	Nalbari	Assam
6.	G.K. Fish Producer Company Ltd.	Fish	Nalbari	Assam
7.	Krishna Paddy Producer Company Ltd.	Paddy	Barpeta	Assam
8.	Kujia Milk Producer Company Ltd.	Milk	Chirang	Bodoland (BTC)
9.	East India Hills Farmer producer Company	Vegetables	East Khasi Hills	Meghalaya

Table 1: List of existing Farmer Producer Companies in Assam (FPCs)

# 3. Vision

To provide quality services in the direction of building a prosperous high quality seed production and flourishing agricultural sector by promoting farmer owned organizations with increased participation of the private sector supported by government,

academia and research agencies by providing pure high quality seed of high yielding varieties, proper monitoring and field inspection right from field/farmers selection, sowing to harvesting, cleaning, grading, labelling, seed certification, procurement and distribution.

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# 4. Mission

To provide assistance in terms of policy action, technical knowledge, infrastructure and resources in order to increase farmers' access to advanced technology for profitable agricultural production and eventually transform small scale farmers into entrepreneurs.

- 5. Eligibility Criteria for Farmer Producer Companies (FPCs)
  - It is a duly registered FPC as defined under Part IXA of the Indian Companies Act, 1956.
  - It has levelled equity from its Members as laid down in its Articles of Association/Bye laws.
  - The number of its Individual Shareholders is not less than 50.
  - Its paid up equity does not go beyond Rs. 30 Lakh.
  - About 33% of its shareholders are small, marginal and landless tenant farmers as defined by the Agriculture Census carried out periodically by the Ministry of Agriculture, GOI.
  - Permitted shareholding by any one member other than an institutional member is not more than 5% of total equity of the FPC.
  - Most shareholding of an institutional member should not be more than 10% of total equity of the FPC.
  - It has a duly selected Board of Directors (BoD) with a minimum of five members, with adequate representation from member farmers and minimum one woman member.
  - It has a duly constituted Management Committee in control of the business of the FPC.
  - It has a business plan as well as budget for next 18 months and this is based on

a sustainable, revenue model as may be determined by the Implementing Agency.

- The FPC has an Account with a bank (Scheduled Commercial Bank as per RBI Act, 1934)
- It has a Statement of Accounts audited by a Chartered Accountant (CA) for minimum one full financial year.
- **6. Advantages:** Formation of FPCs for rice seed production helps
  - Supply pure high quality seed of rice to the registered growers/farmers in time.
  - Increase the seed replacement rate.
  - Empower self sufficiency and self reliance to the farming communities.
  - Increase faith among the farmers about the quality because of known source of production.
  - Give the producer and consumer to being mutually benefited.
  - Open the door for fast disseminate of new cultivars of different kinds.
  - Exclude the role middlemen's from supply of duplicate or unauthentic seed.
  - Enhance the production as well as income of farmers by supply of pure seed in time.
  - Encourage collaborative research and development activities among farmers, government organizations and private agencies.
  - Disseminate rice production technology, inputs and capacity building of the Field Functionaries, extension workers and Progressive Farmers.
  - Impart training to rice farmers, field functionaries, extension specialists, research workers on improved rice seed production technology and rice-based farming systems.

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## 7. Roadmap

The following roadmap will be followed by the Farmers Producer Company for production and marketing of superior quality of high yielding variety of rice.

Procurement of breeder seed/foundation seed of high yielding variety of rice (winter paddy var. *Chandrama, CR Dhan 909, CR Dhan 601, CR Dhan 505, CR Dhan 501, CR Dhan 506, CR Dhan 50, Abhisek, Ranjit, Shrabani, Bahadur, Ranjit Sub-1, Bahadur Sub-1, Swarna Sub-1, Naveen, Sahabhagi Dhan*), (Summer paddy var. *Naveen, Sahabhagi Dhan, Abhisek, CR Dhan 310, CR Dhan 601, Joymoti, Kanaklata, Bishnu Prasad, Jyoti Prasad*) from ICAR-RRLRRS-Gerua, Assam and Assam Agricultural University

Selection of progressive farmers /member farmers and distribution of breeder/foundation seed.

Training of seed producers on seed production technology at ICAR-RRLRRS-Gerua, Assam/Krishi Vigyan Kendra of the district

Registration for foundation/certified seed production at Assam State Seed Certification Agency (ASSCA)

Cultivation of paddy for seed production following the recommended package of practices with the technical advice of the Subject Matter Specialist of KVK of the district and Scientist of ICAR-RRLRRS-Gerua, Assam

Monitoring of field by breeder/SMS of KVK/ASSCA at least three times viz., preflowering, after flowering and before harvesting to ensure absence of off-types, weeds and proper control on pests and diseases by roughing, weeding and IPM practices

Harvesting and threshing of the crop with a care to avoid the mixing of undesirable seed

Cleaning, bagging and tagging of seed with the lot number provided by Assam Seed Certification Agency

Procurement of seeds by the Farmer Producer Company

Selling of collected seeds to the farmers of the state at reasonable price

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S. No.	Variety Name	Indent (in qtls)		Actual Seed Production-Shortfalls if any (in qtls)			
		DAC	State	Any other	DAC	State	Any other
1	Chandrama	30			36		
2	Naveen		64		45		
3	Abhisek		16		8		
4	Sahabhagi Dhan			3	4		
5	CR Dhan 310			2	4		
6	CR Dhan 909		2	1	5		

Table 2: Breeder and Foundation Seed Multiplication of high yielding varieties at RRLRRS, Gerua during 2017:

# Conclusion

The idea of producer companies can be analyzed within the general trend of farmer organizations transforming into more marketoriented and business-oriented forms of institutions. It represents a tool for smallholder farmers to get organized and to reap benefits-not only from joint action, but also from links to evolving high-value markets in India's urban centres. The organizational structure of producer companies takes and uses much from the cooperative idea, yet they are professionally managed to ensure economic viability and to prevent political leverage. The successful outcome of producer companies, still, depends on more or less the same factors as for cooperatives, because it depends on farmers' commitment to the company. The integrity and quality of the leadership, its acceptance within the community, as well as the market environment are the most crucial factors for a successful producer company. It has to be economically beneficial for the participating farmers to market their excess production through the company. At the same time, the company has to provide appropriate knowledge to generate excess production from within the community in order to maintain linkages to the target markets. However, concerns can be raised when it comes to the importance of NGOs in the support of producer companies. Setting up a

producer company is a lengthy and demanding undertaking, which cannot be done on small holders' individual initiatives alone. Nevertheless, there is a need to define limits of support, especially when the aim of the new model is to establish competitive and independent business units.

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