A Study on Performance of Seed Societies for Empowerment of Members

D.K. Singh[1], S.B.Agrawal[2], Alka singh[3], Neelu Vishwakarma[4] and Deepmala Singh[5]

1&4. KVK, Jabalpur, 2. Dept. of Agronomy, CoA, JNKVV, Jabalpur, 3. KVK, Sidhi, 5. Res.Scholar, RDVV, Jabalpur

Corresponding author e-mail: dineshkumar3280@gmail.com

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ABSTRACT

The Seed Societies follows the approach of forming a community based farmer group. The Seed Societies group produces quality seed of paddy, wheat and chickpea variety that best suits to the locality. Training plays an important role for changing in behaviour by up gradation of knowledge, skill and ability of society members. The improved technical and management farming activities will be supportive for quality seed production, and empowerment of society members. The various seed societies formulated by the farmers for fulfilment of seeds requirements of the district. Out of 66 societies of seven blocks only six societies were selected from 6 blocks and 15 respondents were selected in each seed society for the purpose of study. It is concluded that seed societies were producing sufficient quantities of seed for different crops and made available to the farmers. The societies members were also empower with the enhancing knowledge and skills in the field of seed production techniques, marketing and organizing the member of societies.

Key words : *Knowledge; Production level; Empowerment; Seed society;*

Seed Societies is an approach to empower farmer community in order to provide quality seed for farmers, local seed markets, open avenues for people to start seed businesses, and offer farmers a 'basket' of crop varieties to choose from. Farmers and Farm women from disadvantaged groups are needs to be encouraged to participate in Seed Societies. It requires knowledge up gradation, small infrastructure, equipment, technical backstopping, and coordination with other agencies (*Souvik et al, 2011*). In the changing global scenario, to make agricultural society knowledge intensive and knowledge vibrant one, the appropriate communication strategy can play a pivotal role (*Hanglem et al, 2014*).

The Seed Societies follows the approach of forming a community based farmer group comprising 11- 50 members and register under society act. The Seed Societies group produces quality seed of paddy, wheat and chickpea variety that best suits to the locality. The Seed Societies activities are being implemented in collaboration with government, non-government and private organizations as implementing partners. Seed Societies program is conducted through trained farmers groups including women and disadvantaged groups. These groups are trained on seed production pertaining to field inspection and seed certification, post-harvest management of seed including proper storage and packaging *(Sanchita et al, 2013*). Society based seed production has been successfully implemented for ensuring seed self-sufficiency and increasing seed production (*Jha, 2011*). The Societies provide the benefit of economies of scale, cost effective alternative for different financial services, collective learning, democratic and participatory culture, a firm base and platform for dialogue and cooperation (*Thakur and Barman, 2015*).

Training plays an important role for changing in behaviour by up gradation of knowledge, skill and ability of society members. To improved agricultural practices, use of traditional knowledge, skill and experience as well as research based techniques will be helpful for successful seed production work (*Singh et al, 2011*). Management of problems arises during the farming like;

disease pest occurrence, soil water management and management of need based treatments.

Quality seed is very important thing for increasing the production. It is necessary to maintain the varietal characteristics of seed and management of seed borne diseases for the production of high quality seed. The improved technical and management farming activities will be supportive for quality seed production, and raising livelihood & empowerment of society members (*Rohit et al, 2012*).

METHODOLOGY

The study related to seed societies performance in relation to empowered farmers group were conducted during 2016 to 2018. The various seed societies formulated by the farmers for fulfilment of seeds requirements of the district. A total of 66 seed societies registered under society act at Jabalpur. There are 7 blocks namely Sihora, Patan, Majholi, Shahpura, Panagar, Kundam and Jabalpur .Out of 66 societies of seven blocks only six societies were selected from 6 blocks and 15 respondents were selected in each seed society for the purpose of study. Hence 90 respondents were selected by random sampling methods. The data were collected through pre structured interview schedule.

RESULTS AND DISCUSION

Table 1 presents the distribution of the seven independent variables of socio economic profile of seed societies members ie age, education, land holding, annual income, market linkage, decision making and seed replacement ratio in present study. The study revealed that the members belongs to young age group 43.33 % followed by middle 36.67%. In respect of education, 36.67% society members were higher secondary followed by 20% graduate, 17.78% middle school, 16.67% post graduate and above while 8.88% of primary level education.

In regard to land holding, 48.89% possess 2.1 to 4 ha land belongs to Middle land holding group and 31.11% having large farmers group having more than 4.00 ha land while small and marginal farmers having up to 2.00 ha area covers the 20.00%. The annual income of 55.56% farmers were in middle income group ie. Rs.50,000 to 1,00,000 while lowest income group (50,000) having 16 members (17.78%).

Table 1. Socio-economic profile of society members (N=90)

Categories	No.	%
Age		
Young	39	43.33
Middle	33	36.67
Old	18	20.00
Education		
Primary	08	8.88
Middle	16	17.78
Higher Sec.	33	36.67
Graduate	18	20.00
Post graduate and above	15	16.67
Land holding		
Small & Marginal farmers(<2.0 ha)	18	20.00
Middle farmers(2.1 to 4.0 ha)	44	48.89
Large farmers(>4.0ha)	28	31.11
Annual Income		
Low income(>Rs.50,000)	16	17.78
Middle income (Rs.50,001 to 1,00,000)	50	55.56
High income(<1,00,000)	24	26.67
Market linkage		
Low	26	28.88
Medium	42	46.67
High	22	24.44
Decision making		
Low	19	21.11
Medium	43	47.78
High	28	31.11
Seed replacement ratio		
Low	27	30.00
Medium	30	33.33
High	33	36.67

The majority of member having the medium market linkages ie. 42 members (46.67%), low linkage group 26 members (28.88%), and 22 members (24.44%) having the high level of market linkages. As regards to the decision making of society members it was observed that the majority 47.78% belongs to medium group of decision making while 28 number (31.11%) having high level. The seed replacement rate were belongs to high member group ie. 36.67%, However, the 30 members (33.33%) belongs to medium group.

The above data inferred that the members of seed societies belongs to medium group of education, land holdings, annual income, market linkage and decision

making. While Age and seed replacement ratio is high. Hence it is suggested that the members requires to increase the coordination of market linkages, decision making process and increase seed replacement ratio in the welfare of Society members.

Table 2. Knowledge level of paddy seed producer (N= 90)

Statements	High		Medium		Low	
	No.	%	No.	%	No.	%
Soil health management	22	24.44	38	42.22	30	33.34
Nursery management	26	28.87	42	46.67	22	24.44
Transplanting methods	23	25.55	49	54.44	18	20.00
INM	19	21.11	38	42.22	33	36.67
Irrigation management	28	31.11	48	53.33	14	15.55
Weed control methods	32	35.56	37	41.11	21	23.33
Rouging technique	27	30.00	47	52.22	16	17.78
IPM	13	14.44	48	53.33	29	32.22
IDM	16	17.78	33	36.67	41	45.55
PHT	23	25.56	38	42.22	29	32.22

Table 2 presents the knowledge level of paddy seed producers and found higher level knowledge in respect to weed control (35.56%) but medium knowledge of 54.44% in methods of transplanting while integrated disease management recorded low level of knowledge which was 45.55%. Further, the high level of knowledge (30.00%) medium level of 53.33% and low level of knowledge 36.67% were recorded for roughing technique, irrigation management as well as nutrient management, respectively.

Table 3. Knowledge level of Chickpea producer (N= 90)

Statements	High		Medium		Low	
	No.	%	No.	%	No.	%
Soil health management	26	28.89	40	44.44	24	26.67
Seed treatments	31	34.44	43	47.78	16	17.78
Seed sowing methods	36	40.00	40	44.44	14	15.56
INM	43	47.78	34	37.78	13	14.44
Irrigation management	52	57.78	29	32.22	9	10.00
Weed control methods	15	16.67	24	15.56	51	56.67
Rouging technique	23	25.56	49	54.44	18	20.00
IPM	18	20.00	38	42.22	34	37.78
IDM	21	23.33	43	47.78	26	28.89
PHT	28	31.11	26	28.89	36	40.00

Table 3 presents similarly the chickpea producer had the different level of knowledge. The chickpea producer had the high level of knowledge with respect to irrigation management 57.78%, medium level 54.44% farmers in rouging while 56.67% farmers had the low level of knowledge with respect to weed control in chickpea.

Table 4. Knowledge level of wheat seed producer (N= 90)

Statements	High		Medium		Low	
	No.	%	No.	%	No.	%
Soil health management	27	30.00	44	48.89	19	21.11
Seed treatments	21	23.33	36	40.00	33	36.67
Seed sowing methods	44	48.89	35	38.89	11	12.22
INM	18	20.00	41	45.56	31	34.44
Irrigation management	26	28.89	55	61.11	9	10.00
Weed control methods	16	17.78	62	68.89	12	13.33
Rouging technique	33	36.67	33	36.67	24	26.67
IPM	24	26.67	29	32.22	37	41.11
IDM	19	21.11	29	32.22	42	46.67
PHT	28	31.11	26	28.89	36	40.00

Table 4 presents that the highest level of knowledge in seed sowing having 48.89% farmers closely followed by 36.67% in roughing techniques. Whereas, the 68.89% closely followed by 61.11% farmers having medium level of knowledge in weed control and irrigation management. On the other hand 41.11% and 36.67% farmers having low level of knowledge with respect to integrated pest management and seed treatment, respectively.

It is evident from the data presented in Table 5 that seed production of paddy proved beneficial over grain production as seed gave an additional return of Rs. 43420/ha. Hence, society

Table 5 presents that the chickpea seed and grain production programme was taken by society members simultaneously at the same season and found that seed production of chickpea found to be the more beneficial as compared to grain production. Seed production programme fetched net returns of Rs.135250/ha with an additional returns of Rs. 50450/ha. Whereas grain production gave only Rs. 84800/ ha.

Table 5 presents that the seed production of wheat in rabi season was taken up by member of seed societies. The computation of economics shows final seed production programme is economically more beneficial and fetched an additional return of Rs.22950/ ha on the other hand grain production per hectors gave Rs. 39050/ha as compared to 62000/ha from seed.

The various constraints one in the seed production societies which were faced by member are presented in Table 6. Data recorded in survey it was observed

Table 5. Seed production performance of differnt crops (N= 90)

Crops	Seed production (q /ha)	Grain production (q /ha)	Cost of production (Rs. /ha		Gross return (Rs./ha)		Net Return (Rs./ha)		Net Adl income (Rs. /ha)
			Seed	Grain	Seed	Grain	Seed	Grain	
Paddy	38.7	45.5	29500	23250	116100	66430	86600	43180	43420
Chickpea	15.5	18.0	27500	23200	162750	108000	135250	84800	50450
Wheat	34.0	41.0	31500	24500	93500	63550	62000	39050	22950

* Paddy sale rate of seed: 3000/q, Sale rate of grain : 1460/q; *Chickpea sale rate of seed : 10,500/q, Sale rate of grain : 6,000/q; * Wheat sale rate of seed : 2750/ q, Sale rate of grain : 1550/q

Table 6. Common constraints faced in seed production societies (N= 90)

Statements	Ranking
Improper seed sampling	IX
Expensive storage	III
Delay in payment of subsidies	VIII
Process of certification is lengthy and time consuming	IV
Availability of facilities for for seed procuring	II
Expensive Transportation	V
Improper monitoring and guidance	VI
Improper supply of desired seeds variety	VII
Lack of coordination amongst the member of the societies	I

that in most of the societies were suffering due to improper coordination among the members of societies, Where as second problem was faced by society non-availability of seed processing facilities which is an important step in seed production. On the other hand, storage facilities are mostly in stress parting to seed storage.

CONCLUSION

On the basis of three years studies with respect to performance of seed societies for socio economics empowerment of members, it is concluded that seed societies were producing sufficient quantities of seed for different crops and made available to the farmers. The societies members were also empower with the enhancing knowledge, in the field of seed production techniques marketing and organizing the member of societies. Thus, the presently these societies proved to be the boon for farming communities with respect to socio economic empowerment

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