







## 5. Discussion

Crop Combination Planning										
Season	Farmsize in Crop ha.	Marginal	Small	Semi Medium		Medium			Large	
		Below 1.0	1.0 to1.99	2.0 to 2.99	3.0 to 3.99	4.0 to 4.99	5.0 to7.49	7.5 to9.99	10to11.99	12 &above
Kharif	Mung	0.083160	0.083160	0.083160	0.083160	0.083160	0.083160	0.083160	0.083160	0.083160
	Sesamum	0.26to0.96	0.92 to1.91	1.92to2.91	2.92to3.91	3.92to4.91	4.92to7.41	7.41to9.91	9.92to11.91	11.92&above
	Wheat	0.123533	0.123533	0.123533	0.123533	0.123533	0.123533	0.123533	0.123533	0.123533
	Fennel	0.26to0.88	0.88 to1.87	1.88to2.87	2.88to3.87	3.88to4.87	4.88to7.37	7.38to9.87	9.88to11.87	11.88&above
Rabi	Wheat	0.123533	0.123533	0.123533	0.123533	0.123533	0.123533	0.123533	0.123533	0.123533
	Potato	0.26to0.88	0.88 to1.87	1.88to2.87	2.88to3.87	3.88to4.87	4.88to7.37	7.38to9.87	9.88to11.87	11.88&above
	Wheat	0.123533	0.123533	0.123533	0.123533	0.123533	0.123533	0.123533	0.123533	0.123533
	Fennel	0.5258802	0.50 to1.00	0.33to1.32	1.33to2.32	2.33to3.32	3.33to5.82	5.83to8.32	8.33to10.32	10.33&above
	Potato	0.3505868	0.40 to0.87	1.54908	1.54908	1.54908	1.54908	1.54908	1.54908	1.54908
	Wheat	0.123533	0.123533	0.123533	0.123533	0.123533	0.123533	0.123533	0.123533	0.123533
	Fennel	0.3505868	0.40 to 0.87	1.739369	1.739369	1.739369	1.739369	1.739369	1.739369	1.739369
	Potato	0.5258802	0.50 to1.00	0.14 to1.13	1.14to2.13	2.14to3.13	3.14to5.63	5.64to8.13	8.14to10.13	10.14&above
Summer	Bajara	1.0	1.0 to1.99	2.0 to2.99	3.0 to 3.99	4.0 to 4.99	5.0 to 7.49	7.5 to9.99	10to11.99	12 &above

The present study shows that, marginal farm holders can get 3466 kg to 23854 kg. production, small farm holders can get 3743 kg. to 30807 kg. production, semi medium farm holders can get 8888kg.to 51527 kg. production, medium farm holders can get 17572 kg. to 90528 kg. Production & large farm holders can get 274383 kg. and above crop production of various crops during whole year.

In Patan district, most of farmers are semi middle and middle farm holders .On the other hand land constraints has a very important role in determining the optimal model. According to results farmer can get profit of Rs.362020 which is more than his aspiration level. Also a farmer can achieve maximum production and plan his course of action on multiobjective task. The application of fuzzy concept in cropping pattern for high economic expectations has successfully tackled the uncertainty and imprecision in profits and production.

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