SUMMARY AND CONCLUSION

The choice of field of specialization for higher agricultural education and the preference/priorities pattern for job areas are the significant contributors in building up the career of farm graduates coming out from agricultural university and colleges. These two components play an important role and governed by many attributes of the human personality complex including their socio-personal and psychological characteristics. Keeping this in mind, the present investigation was carried out with the following specific objectives:

1. To assess farm graduates' attitude for higher agricultural education vis-a-vis employment.
2. To ascertain the graduates' preference pattern for specialization in higher agricultural education.
3. To ascertain perceived preferences and job priorities of the farm graduates.

4. To find out association between background (socio-cultural and personal) variables and attitude, preference pattern and job priorities.

5. To suggest specialization strategy for higher agricultural education based on perceived preferences and priorities of the graduates to be adopted by SAUs.

The present study to find out the preference pattern for specialization in higher agricultural education and job priorities was conducted in Chaudhary Charan Singh Haryana Agricultural University, Hisar taking the final year/ternship students (henceforth called farm graduates) of different colleges as the subjects of study. These included four colleges viz., College of Agriculture, College of Agricultural Engineering & Technology, College of Home Science and College of Veterinary Science. The total number of respondents was 218. The respondents were personally interviewed by the researcher with the help of a well structured schedule for the collection of data. The schedule was made quite comprehensive to cover all the aspects in the light of the objectives of the study. Besides, socio-personal and psychological variables included under the profile of the respondents, the information was also collected on farm graduate's attitude for higher agricultural education, the choice for field of specialization and job priorities perceived by them. The Paired Comparison Technique (PCT) was used in addition to the collection of data through direct questions. The attitude was measured through Likert's (1932) Summated Rating Scale by following all
the steps precisely in a scientific manner. The analysis of data included the computation of frequency counts, percentages, weighted mean score, preference index, rank orders etc. to draw the meaningful and logical inferences. The association between independent and dependent variables was worked out by applying Minimum Discrimination Information Statistics (MDIS) test.

Following results have emerged from the present investigation and mentioned objective wise. Before these are summarised the profile of the respondents is being presented for describing their various socio-personal and psychological traits.

All the respondents were covered between age group of 18-25 years, however, the majority belonged to the age group of 21-25 years. On the role group basis, the farm graduates were almost evenly divided between rural and urban background with the remarkable mention that all the graduates from 3 year Home Science programme had urban background and almost all from 6 year Agriculture programme had rural background. Regarding the respondents distribution, the overall sex ratio (boys-girls) was approximately 3:2 and almost all the farm graduates were unmarried except in case of 5 year Home Science programme. Majority of the students were admitted from the open category in the first degree programme and the remaining were from reserve category. The academic achievements of the farm graduates revealed that almost half of respondents obtained more than 70 per cent marks and the remaining ones could secure between 50-60 per cent and 60-70 per cent marks. More than half of the students' decision to join agricultural university was
Agronomy and Horticulture was preferred most by the respondents of College of Agriculture unanimously. On the other hand, Nematology and Agricultural Meteorology were the least preferred subjects. In Veterinary and Home Science streams, the subjects preferred most, were Veterinary Medicine and Child Development, respectively, whereas the Veterinary Pharmacology and Home Science Extension Education were, respectively the least preferred subjects. In case of College of Agricultural Engineering, both Farm Power & Machinery and Agriculture Processing & Energy occupied the top position.

About half of the total number of farming graduates wanted to pursue higher agricultural education, while the remaining were either interested for taking up of some job or to establish their own business/enterprise. Further, almost two-third respondents of the total sample wanted to go for higher agricultural education if admitted to the discipline of their choice, whereas more than one-third were willing even if they did not get admission in the subjects of their choice. The results of the study also revealed that the farm graduates who wanted to pursue higher agricultural education if given admission in the discipline of their choice, the main reasons/considerations given by them were better job prospects and personal interest in the discipline. However, the remaining farm graduates who were willing to go for higher agricultural education even if admitted in the subjects which were not of their choice, had the main consideration 'something is better than nothing' supported by other reasons like there might be possibility of getting the job in future or they may develop interest and liking for the discipline which is not of their choice, in due course of time. The farm graduates who
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did not like to go for higher agricultural education, wanted to take up some jobs.

The preference pattern of farm graduates after completing their first degree indicated that the State Govt. jobs were ranked at the top followed by Civil and Administrative jobs and jobs in Educational and Research Institutions. However, in response to a direct question to check only one most preferred job, among the 8 broad job areas. It was found that Civil and Administrative jobs, State Govt. jobs and the jobs in Educational and Research Institutions were most liked job areas in a descending order of farm graduates' choice. Based on the job priority index, it was revealed that Civil and Administrative jobs category was ranked first followed by State Govt. jobs and jobs in Educational and Research Institutions. Conclusively, the findings obtained from three different approaches resulted in almost identical inferences and the main reasons responsible for these were more freedom of work, better facilities, better perks, job security, etc.

Another significant finding of the study revealed that the academic performance of agricultural stream and sex/gender of veterinary stream farm graduates showed association with the choice pattern of job areas at 5 percent level of significance.

CONCLUSION

The present study is confined to farm graduates' perceived preferences and priority pattern for specialization in higher agricultural education and employment. Preferences and priorities are the two sides of the same coin which are interrelated and interdependent. What has been the preferences of
farm graduates for pursuing higher agricultural education in the present investigation was found to be governed by the kind of priorities they had been given for different job areas. It is very much pertinent to mention here that a high majority of the subjects of study, by showing their favourable attitude towards higher agricultural education vis-a-vis employment, has amply established the above correlation.

The findings on the attitude variable have revealed that students of Agriculture stream had highest degree of positiveness followed by Home Science, Agricultural Engineering and Veterinary Science streams. Hence, one can easily infer that the Agriculture students in comparison to other streams find it more appropriate to pursue postgraduate studies in view of the restricted employment opportunities available to them after graduation, whereas Veterinary College students having good job avenues after their first degree have reflected relatively less favourable feeling to pursue higher cultural education. This might have affected the admission policy of the agricultural Universities at the Master's level.

Having favourable attitude towards higher agricultural education is, of course important, but it is more important to decide about the kind of professional specialization one should obtain after his first degree. The reference pattern for specialization is mainly based on the job opportunities available in market, leaving aside the other factors. It has been a very common phenomenon that every one before opting for a particular specialization for higher agricultural education keeps in mind the kind of job avenues, he would be able to secure. Probably this is the reason that Agronomy and Horticulture have been preferred most among the various disciplines of College of Agriculture. These are pivotal subjects of Agriculture and cover all aspects
of crop/fruit production (both pre and post harvest) and provide comprehensive knowledge and skills to the students for building up their capabilities and capacities to perform as an efficient farm operator/manager. A student of these disciplines learns every bit of various subjects of Agriculture related with crops/fruit production and thus, they act as Generalist and may prove much better than the specialists to solve various problems of the farmers. Hence Agronomy and Horticulture due to their comprehensive nature, may fit well for variety of jobs or employment that may belong to different sectors like State Govt. jobs, Agro-based Public Sector and Agro-based Private Sector, Self Employment, Farming etc.

Regarding Agricultural Engineering stream, Farm Power & Machinery and Agriculture Processing & Energy have been preferred most. Both these subjects are practical in nature and have lot of applicability under field situations. One may act as a good professional in the field of Agricultural Engineering, if possesses deep understanding of both theory and practice relating to these two subjects. Thus, the farm graduates having such type of specialization seem to be more suitable for the jobs relating to Agro-based Public sector and Agro-based Private Sector, Self Employment, State Govt. jobs, etc.

Child Development and Foods & Nutrition were the disciplines from Home Science stream which had the maximum preference. These disciplines as such, deal with the various aspects of care, maintenance and feeding of the children right from their birth and thus are quite useful and beneficial for common masses. The farm graduates having specialization in these disciplines are therefore, best suited in the State Govt. jobs especially in Integrated Child Development Scheme (ICDS) project of Haryana State, Self Employment, etc.
in higher agricultural education. This is essential, since job avenues available in the market do need the persons having professional abilities and competencies to give better output. Further, the subjects preferred by the respondents for specialization were mainly the Agronomy and Horticulture from Agriculture stream, Farm Power & Machinery and Agriculture Processing & Energy from Agricultural Engineering stream; Child Development and Foods & Nutrition from Home Science stream and Veterinary Medicine, Veterinary Public Health & Epidemiology and Veterinary Surgery from Veterinary stream. Regarding priorities for jobs, the farm graduates gave the highest priority to Civil/Administrative jobs, State Govt. jobs and Educational and Research Institutional jobs in view of the job security, better pay scales and more freedom of work.
SPECIALIZATION STRATEGY FOR HIGHER AGRICULTURAL EDUCATION

The aspect of human resource development is of vital significance and equally true for farm graduates who are going to be specialists, experts and professionals of tomorrow. This demands the re-orientation of higher agricultural education in view of the emerging priorities for job areas available in the market. Thus, there is a strong need to streamline the policies, programmes and contents of higher agricultural education to match with job needs. The present investigation is also an effort in this direction and has sought on surface a good number of strategic points which need serious attention to develop a sound plan of action.

The emphasis on specialization for higher agricultural education should be more on the subjects which are broad based like Agronomy, Horticulture, etc., and provide comprehensive knowledge and skills on various aspects of crop production. This would provide better job opportunities for the farm graduates particularly in the context of job areas like State Government, Educational and Research Institutions and Self Employment.

The clinical subjects pertaining to Veterinary stream like Veterinary Medicine, Veterinary Public Health & Epidemiology, Veterinary Surgery etc., have wider applicability and relevance under field conditions. Thus, specialization in clinical subjects for higher agricultural education must be given top priority by the farm graduates. Moreover, there are abundant job opportunities for the students turned professionals in the clinical subjects both within and outside the country.
Children are the future of any country and we need to build a task force which can take care of the different aspects of the child development including foods and nutrition. Better it would be, if the said task force is composed of highly specialized professionals in the disciplines of *Child Development* and *Foods & Nutrition* which have better job opportunities, particularly in the State like Haryana, where specialized projects have been initiated and implemented for the care, maintenance and nutritional aspects of the children.

In the present study, the specialization for higher agricultural education in Agricultural Engineering stream has been restricted to two disciplines namely *Farm Power & Machinery* and *Agriculture Processing & Energy* on account of their wider scope and practicability under field situations. The professionals having specialization in these areas would prove to be more competent and efficient Agricultural Engineers for rendering significant contribution in the progress and prosperity of the nation. Regarding job avenues, these areas of specialization have better prospects and opportunities in the *Agro-based Public sector, Agro-based Private sector, Self Employment and State Govt. jobs.*

The curriculum of professional degrees/courses leading to specialization in higher agricultural education need to be re-oriented in a way that these should match with the requirements of jobs available to the farm graduates both in public and private sectors. Therefore, the prime concern of the higher professional training institutions/centres is to ensure that the contents of the courses adequately cover
the job requirements both in theory and practice. The authorised representatives of the concerned public and private sectors can play an important role in this context. There is need to have a systematised approach where involvement of these representatives should be maintained and they should be requested to provide a regular feedback to the Agricultural Universities/Institutions.

The farm graduates who are able to seek admission in the discipline of their choice for higher agricultural education attain psychological satisfaction and may come out as successful professionals in their life. However, the students who accept the admission under compulsion may become a liability for the University and would not be able to lead a satisfied career. It would be thus advisable to go for aptitude test which would help the institutions to make choice for right type of persons for right disciplines/specializations for higher agricultural education. Although, it is quite common in private sectors but need to be introduced and strengthened in the Agricultural Institutions.

There is common observation that the practical orientation of students at the postgraduate level is lacking to the greater extent. They may be assigned the field work in supervision of the faculty of the concerned discipline both at the research centres and under the rural conditions. The placement of farm graduates with the Agri-based Public sector and Agro-based Private sector for appropriate durations may also prove quite beneficial.
Specialization in higher agricultural education comes out mainly with two types of professional: one interested in academics and another who want to go for practical work. This is almost applicable for all the four streams included in the study. Thus, it may be considered worthwhile that the farm graduates after completing their first degree may be asked to choose the discipline of specialization in the light of the above two options. And accordingly, they may be provided trainings as per their respective choice during their professional degrees/courses.

The job opportunities should be made available to the farm graduates at the time when they are expected to finish their academic schedule of first degree. This would certainly help those graduates who wish to enter the job but pursue higher agricultural education under compulsion. This would also facilitate the admission of the interested persons who are very keen to go for higher agricultural education.

The Civil Administrative jobs, State Govt. jobs and jobs in Educational and Research Institutions have secured top ranked priorities by the farm graduates mainly because of the reason of job security. However, Agro-based Public sector and Agro-based Private sector jobs are very lucrative and challenging ones and should be accepted by the graduates in general, since these are not in any way less important than other areas of jobs as far as security of job is concerned, but they require hard working, challenge loving, confident and devoted persons.