Research Note

PROFILE OF AGRICULTURAL SCIENTISTS : A STUDY AT G.B.P.U.A.& T., PANTNAGAR

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Indian Agriculture after independence has achieved major landmarks by not only attaining self-sufficiency in food production, but also making many technological breackthroughs. The sea change in agriculture sector is the outcome of recognizing agriculture as scientific field with establishment of state Agricultual Universities (SAUs). Presently, the country has 32 SAUs for imparting higher agricultural education. The professionalism and development of highly skilled manpower is the outcome of established networks of SAUs all over the country.

The concept of rural universities was introduced in India on the pattern of Land Grant College philosophy of United States of America. Pandit Govind Ballabh Pant pioneered the first agricultural university in 1960, thus Govind Ballabh Pant University of Agriculture and Technology (formerly known as U.P. Agricultural University) came into existence. Development of agricultural scientists is directly or indirectly related with the development of whole agriculture and this is ultimately useful for the mankind because Indian Agricultural Research System is one of the largest system in the world. Performance and productivity of the scientists is largely dependent on and governed by the ways, means and manners by which they seek information and also on the circle in which they interact. In this content socio-economic profile of agricultural scientists acquire immense importance since this can be of help in gearing up the entire agricultural research system.

Agricultural Scienctists under the umbrella of agricultural universities have solved many of the crucial problems of country's food production as well as the problems of local farmers. Not only this but teaching and research at undergraduate and postgraduate level resulted in establishing agriculture as the professional education. Keeping these facts in view this study was carried out.

REVIEW OF LITERATURE

In the study conducted at G.B.P.U.Ag. & Tech, Tyagi (1993) found that the majority of the respondents (63.2%) has been of middle age followed by those of old and young age (22.9% and 13.85%). A vast majority of the scientists (87.04%) had a Ph.D. degree followed by those who had post doctorate degree (11.11%). Majority of respondents (62.04%) had total service experience between 11 to 24 years, while 19.44% respondent had experiences below 11 years.

Rao, Muralidhar and Kalla (1996) in their study found that the scientific staff of state Agricultural Universities spend time on all four activities of state Agricultural Unviersities viz. research, teaching extension and administration. They further reported that scientific staff of State Agricultural Universities lack training opportunities, and senior staff spend more time on administration at the cost of teaching and research. They emphasised the point that reader are relatively more associated with academic activities, where as professors are more associated with administration.

Keshava and Kumar (!997) found that majority of the sample teachers did not attend any inservice training course during last five years. Only 17.12% teachers attended training organised at national level followed by international courses (11.71%). Merely 2.7 per cent teachers attended both type of courses. They further reported that majority of teachers had attended the national level seminar.

METHODOLOGY

This study was confined to the college of agriculture of G.B.P.U. Ag. & Tech. Pantnagar. The College of agriculture was selected due to familiarity and convenience of the investigator.

All the scientists of College of Agriculture were slelected for the investigation. All the respondents could not be contancted, as some of them were not available at the time of data collection. Many of them were posted outstation or were on long leave. Thus, total 147 questionnaires were distributed among the scientists. Finally, 105 respondents sent the questionnaris and they were taken as sample for the study.

The data was collected through structured questionnaire. The secondary sources such as students and scientists of the concerned department together with observations were also used.

Calegories of respondents	No. in university	No. available	No. Sent the reply
Assistant Professor/JRO	88	58	38
Associate Professor/SRO	77	53	39
Professor	72	36	28
Grand total	237	147	105

RESULT AND DISCUSSION

1. Personal and job related attributes of Agriculture Scientists

Personal and job related attributes were studied in terms of age, educational qualification, status, job satisfaction and professional productivity. These attributes have been presented in Table 1 and discussed as follows:

Table 1: Personal and job related attributes of Agricultural Scientists.

S.No.	Characteristics	Categories	Frequency	Percentage
1.	Age	Young (27-37 yrs)	9	8.57
		Middle (37-48 yrs)	34	32.38
		Old (49 and above)	62	59.05
2.	Educational qualification	Ph.D.	82	78.10
		Post Doctoral work	23	21.90
3.	Status	Assistant Professor/J.R.O.	38	36.19
		Associate Professor /S.R.O.	39	37.14
		Professor	28	26.67
4.	Job experience	Less than 8 Yrs	6	5.71
		9-16 yrs.	14	13.33
		17-25yrs	32	30.48
		More than 26 yrs.	49	46.67
5.	Job satisfaction	Satisfied	15	14.29
		Neutral	75	71.42
		Dissatisfied	15	14.29
6.	Professional productivity	High	30	28.57
		Medium	17	16.19
		Low	58	55.24

Results presented in Table 1 reveal that more than half (59.05%) of the respondents were old followed by middle aged (32.38%). Only 8.57% respondents were of young age. Majority (78.10%) of the scientists possessed Ph.D. degree, only 21.90% scientists possessed Post Doctoral Degree as their highest educational qualification. Regarding the status of the respondents, nearly equal number (36.19% and 37.14%) of the scientists were in the rank of Assistant Professor and Associate Professor categories. Only about 26.67% of the scientists belonged to the cadre of Professor. The scientists were categorized into groups on the basis of job experience. Approximately half (46.67%) of the scientists had more than 26 years of job experience followed by 30.48% scientists with job experience of about 17 to 25 years. About 13.33% of the scientists had 9-16 years of service experience and only 5.71% scientists had less than nine years of service experience. Majority of the scientists (71.42%) belonged to neutral response category for job satisfaction. Equal number (14.29%) of the scientists were satisfied and dissatisfied from their present job situation.

Although it was difficult to measure respondents on the basis of professional productivity but certain objective parameters such as research projects, number of courses taught, number of students guided, publications, seminar, conference, workshop attended, number of radio or T.V. talks delivered and number of National and International training received were used. Data shown in the Table 1 indicates that more than half (55.24%) of the scientists had low professional productivity, followed by 28.57% scientists with high productivity score. Table 1 also indicates that 16.19% of the scientists had medium level of professional productivity. The respondents higher on one dimension may not be higher on the other, thereby, the productivity of the scientists was found to be low.

2. Time devoted in different job areas

Scientists of State Agricultural Universities are basically engaged in job activities viz. teaching, reasarch, extension, administration and any other. Table 2 clearly indicates the distribution of scientists on the basis of work hours devoted on different job activities.

Table 2: Distribution of Agricultural Scientist on the basis of time spent by them on different job activities.

Class interval	Job activities				
	Teaching	Research	Extension	Administration	Any other
Less than 25% time	53 (50-48)	5 (4.76)	84 (80.00)	31 (29.52)	10 (9.52)
25%to 50% time	37 (35.24)	40 (38.10)	4 (3.81)	7 (6.67)	2 (1.90)
50% to 75% time	14 (13.33)	46 (43.81)	0	1(0.95)	0
More than 75% time	0	13 (12.38)	0	0	0
*No response	1 (0.95)	1 (0.95)	17 (16.19)	66 (62.86)	93 (88.57)

Note- The figure in parenthesis indicates the percentage in respective categories

*Respondents gave no response in the respective category

The results presented in Table 2 indicates that in case of teaching about half of the total respondents (50.48%) devoted less than 25% of their working hours followed by those (35.24%) who devoted 25-50% of their working hour. Merely, 3.33% scientists devoted 50-75% of their work hours on teaching. None of the individual scientists reported to have spent more than 75% of their time on teaching.

The results in Table 2 further reveal that in case of research, nearly equal number of the scientists (43.81% and 38.10%) devoted 50-75% and 25 to 50% of their work hours. About 12.38% scientists devoted more than 75% of their working hour. Only 4.76% scientists devoted less than 25% of their working time .

Regarding the time spent on extension activities Table 2 clearly indicates that almost all the scientists (80.00%) devoted less than 25% of their work hour on extension. Only 3.81% scientists devoted 25-50% of their total work hour on extension. Not a single scientist devoted 50-75% or more than 75% time on activities related to extension.

In case of administration only 29.52% scientists devoted less than 25% time followed by the scientist who devoted 25-50% of their work hours (6.67%) on administration. Only a single respondent devoted 50% or more of his working hour on administrative activities.

About 9.52% of the scientist reported that they devoted less than 25% of their time on activities other than teaching, research, extension and administration and 1.90% reported to have spent 25-50% of their time on any other activity. In any other category, respondents had mentioned activities like preparation of course lecture, in-charge of different department jobs, guiding/counselling of students and other department activities etc.

CONCLUSION

Based on the findings, the following broad conclusions could be drawn :

i. Majority of the scientists was of old age, holding Ph.D. degree and the post of Associate Professor/SRO.

ii. Nearly half of the scientists were having job experience of more than 26years. Majority of the scientists had low level of job satisfaction and more than half had low level of professional productivity scores.

iii. Most of the scientists spent less than 25% of their working time on teaching and about half of the scientists spent 50-75% of their time on research related activities.

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