



Gender Role Analysis and Development Programs of Central Luzon State University, Philippines

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ABSTRACT

This study aimed to analyze the Research and Development investment of the Central Luzon State University and examine gender issues in R&D implementation, investment, and output. A number of studies has been done on gender analysis but most focus on the participation in the different economic sector and its role in the development process. This study focused on the gender roles in the research and development programs of the Central Luzon State University. Results showed that both male and female acted as research leaders in their respective field. In terms of presentation of outputs in scientific forum, more male researchers in the fisheries and livestock sectors presented their papers in scientific forum, while more female researchers presented paper in the socioeconomic and training sectors. The same trend was found in terms of publications of research outputs; male dominance in the fisheries, farm resources, and livestock sector and dominance of female in the socio-economics and training sectors prevailed. Even in terms of awards received, a similar trend was also noticed.

INTRODUCTION

The CLSU Research and Development program started in 1967, primarily aimed to help graduate students in their academic researches. After more than a half decade, it has established a solid ground in implementing research programs in the different R & D sectors (Crops, Farms Resources, Water Resources, Livestock, Fisheries and Socio-Economics, Training and Extension). Over the years, R & D investment showed an increasing trend which started from PHP 76 million in 1995 to PHP 282 million in 2014.

In other countries, several studies have already been conducted on equality and status of women in research (CRAC, 2016) but on a different perspective. In the Philippines, a number of studies were done on gender analysis but mostly focus on the participation of women in the different economic sectors and role of gender in the development process (2014 March, September issues, UNP GAD Newsletter Vol. 8, N1, Editors Note). Thus, this study demonstrated the role of gender in the Research and Development programs of CLSU from 1995 to 2014, focusing particularly in leadership,

presentation of research results in scientific fora, publication of research, and awards received from the researches conducted.

METHODOLOGY

The data utilized in this study were taken from CLSU's financial reports, Research Extension, and Training Program annual reports, the CLSU President Annual Reports, and terminal reports of the different research centers (Research Office, Ramon Magsaysay-Center for Agricultural Resources and Environment Studies, Small Ruminant Center, Training Office, Water Resources, Freshwater Aquaculture, and Philippine Carabao Center at CLSU).

All data from 1995 to 2014 on research investment were consolidated, tabulated, and analyzed using different techniques such as frequency and percentage distribution. Data were presented using graphs and tables.

RESULTS AND DISCUSSION

1. Research Leaders, Sex Disaggregated

Figure 1 shows the sex disaggregated data of research leadership in the different sectors in research and development. The figure shows that both male and female acted as research leaders in their own respective field of expertise. This is in consonance with the findings of the Research Council in Norway (2017) on gender balance that both genders participate in research on an equal footing. However, the water resources sector is dominated by male and more male research leaders (60%) could be found in the crops sector.

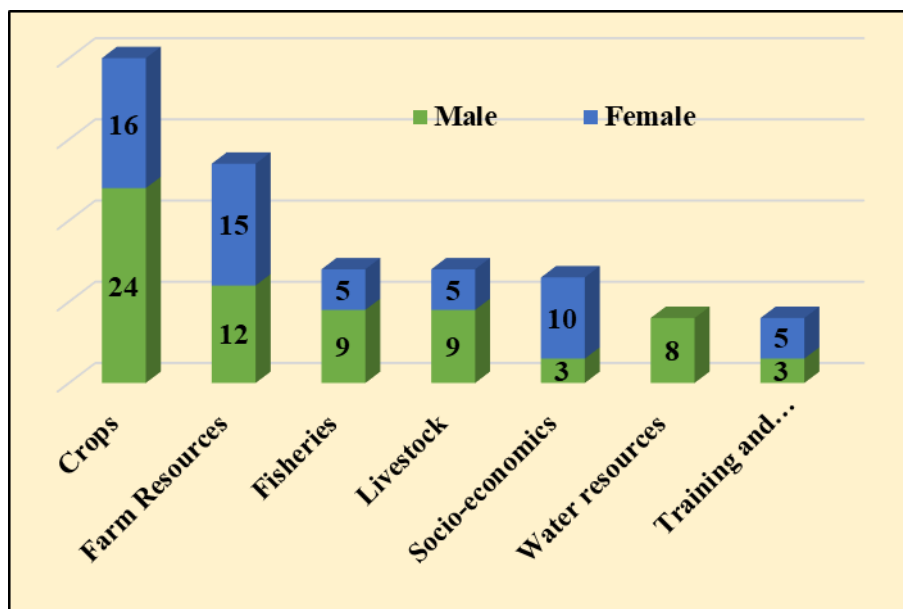


Figure 1. Distribution of R&D leadership by gender per sector, 1995 to 2014.

Technically speaking, the nature and type of work in these sectors are male-related. In the same way, more female research leaders could be found in the socio-economics sector and training sector.

A growing number of studies show that diversity, including gender balance and gender perspective helps to enhance the scientific quality and social relevance of research (Research Council of Norway, 2017).

2. Presentation of Research Output in Scientific Fora

Presentation of research outputs in scientific fora is presented in Table 1. It could be consistently and clearly seen that more male researchers in the fisheries and livestock sector presented their papers in international, national, and local scientific fora, while more female researchers presented papers in the socio-economics and training sector. This may be related to the findings of Research Council on Norway (2017) that the gender imbalance in research also means that the role models are unevenly distributed among subject areas, thus, helping to maintain the male and female educational choices.

Table 1. Sex disaggregated, R&D paper presented to international conferences by sector, 1995 to 2014.

SECTOR	Total Number of Researches	International								National						Local						
		No of research presented		Researchers				No of research presented		Researchers				No of research presented		Researchers						
				Male		Female				Male		Female				Male		Female				
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	TOTAL		
Crops	230	26	11	10	42	14	58	24	18	8	6	40	9	60	15	113	49	29	59	20	41	49
Farm Resources/ Water Resources	133	15	11	6	46	7	54	13	10	8	5	42	7	58	12	48	36	24	56	19	44	43
Fisheries	73	43	59	13	59	9	41	22	23	32	8	73	3	27	11	64	88	33	67	16	33	49
Livestock	76	15	20	12	71	5	29	17	11	14	12	75	4	25	16	62	82	14	54	12	46	26
Socio-economics	42	8	19	1	11	8	89	9	17	40	9	45	11	55	20	37	88	4	31	9	69	13
Training and Extension	48	5	10	1	33	2	67	3	6	13	1	25	3	75	4	22	46	9	38	15	63	24
TOTAL	602	112	19	43	49	45	51	88	85	14	41	53	37	47	78	399	66	113	55	91	45	204

3. Publication

Table 2 presented the R&D papers published in the different sectors. It is interesting to note that the trend on male dominance in terms of more publication in the fisheries, farm resources, and livestock sectors prevailed; the same trend in terms of more publications of female in the socio-economics and training sectors.

Table 2. R&D papers published by sector, sex disaggregated 1995 to 2014.

Sector	No. of researches	No of paper published		Researchers				Total
				Male		Female		
		No.	%	No.	%	No.	%	
Crops	230	44	19.13	28	57.14	21	42.86	49
Farm Resources/ Water Resources	133	71	53.38	22	55.00	18	45.00	40
Fisheries	73	65	89.04	31	59.62	21	40.38	52
Livestock	76	61	80.26	15	68.18	7	31.82	22
Socio-Economics	42	35	83.33	3	21.43	11	78.57	14
Training And Extension	48	35	72.92	5	29.41	12	70.59	17
TOTAL	602	353	58.64	104	50.98	90	44.12	194

4. Awards

Return of investment in terms of award is presented in Table 3. Researchers received awards for either for presentation of research and achievement awards because of their outstanding performance and contribution in their field of expertise.

Again, more awards were received by male researchers in the crops, livestock, farm resources, water resources, and fisheries sectors, while more females received awards in the training and socio-economic sectors. This means that there is consistency on the trend on the performance of male and female roles in research and development, that each of them excels in their respective field of specialization.

Table 3. Sex disaggregated data, R&D awards received by sector, 1995 to 2014.

SECTOR	No. of researches	No. of awards received		Researchers				TOTAL
		No.	%	Male		Female		
				No.	%	No.	%	
Crops	230	7	3.04	33	63.46	19	36.54	52
Farm Resources/ Water Resources	133	10	7.52	18	54.55	15	45.45	33
Fisheries	73	9	12.33	21	56.76	16	43.24	37
Livestock	76	10	13.16	15	62.50	9	37.50	24
Socio-Economic	42	6	14.29	11	47.83	12	52.17	23
Training & Extension	48	1	2.08	3	30.00	7	70.00	10
Water Resources	24	3	12.50	4	57.14	3	42.86	7
Total	602	43	7.14	105	56.45	81	43.55	186

CONCLUSION AND RECOMMENDATION

The role of gender on research and development programs of Central Luzon State University was neither dominated by male or female in terms of research leadership, presentation of papers in scientific fora, and international or local publications of research outputs. Moreover, awards received was neither dominated by male or female, but both genders participate on an equal footing based in each specific field. The fisheries and livestock sectors were the sectors male excelled in, while in the socio-economic and training sectors, more female researchers were the achievers.

Based on the finding of the study, more in-depth analysis should be done looking into a larger perspective not only in terms of output but also on the aspects of who leads in the preparation of proposals, preparation of terminal reports, and many other roles like who gets more fund which will strengthen the findings on gender roles.

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