

A publication of the Policy Advocacy Group of the Department of Science and Technology - Philippine Council for Agriculture, Aquatic, and Natural Resources Research and Development (DOST-PCAARRD)

# A Critical Review of the Importance of Honorarium in Promoting Research Excellence<sup>1</sup>

The Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (PCAARRD) of the Department of Science and Technology (DOST), the sectoral planning council for science and technology (S&T) in agriculture, aquatic and natural resources (AANR), advocates for the continued release of honorarium as a financial incentive in support of R&D initiatives.

Honorarium has an important role in effectively driving research excellence. As a form of incentive, it is an approach that acknowledges the researchers for their time and effort on the account of their broad and superior knowledge and expertise in a specific field. Researchers are the crucial driver of research and development (R&D) productivity and rewarding them on the basis of their outputs builds a capacity for research to support the economic and social growth in the country.

The provision of honorarium is fairly recognized by the General Appropriations Acts (GAAs) and the Republic Act (RA) No. 8439. The Department of Budget and Management (DBM) Budget Circular Nos. 2007-1 and 2, which were developed pursuant to GAA Fiscal Year 2007, define honorarium as a form of compensation given as a token of appreciation or reward for gratuitous services on account of one's broad and superior knowledge and expertise in a specific field. Likewise, RA 8439 or the Magna Carta for Scientists, Engineers, Researchers and Other Science and Technology Personnel in Government provides for the issuance of honorarium for rendering of services beyond the

established workload of scientists, technologists, researchers and technicians whose broad and superior knowledge, expertise or professional standing in a specific field contributes to productivity and innovativeness.

Despite the legal basis to support the granting of honorarium to researchers, issue on the legitimacy and effectiveness of honorarium as an incentive for R&D rose to the forefront with incidences of disallowances and cap on the amount received. To develop a better understanding of this issue, a study was conducted to look at how honorarium is situated within the system of research incentives or reward system influencing behavior of researchers and determine its ability to promote research excellence and thereby enable a more sustainable research culture.

This Brief is organized into four sections. The first section provides a conceptual framework and second the scope and data used in the study. The third section discusses the critical analysis on the policy environment governing R&D, characterization of the researchers and institutions doing R&D, and qualitative and quantitative evidences to highlight the implications of honorarium on R&D. The last section provides some conclusions and policy recommendations.

### **Conceptual Framework**

The framework in assessing the implications of honorarium in the conduct of R&D adopted the S&T-based Economy Framework of DOST where

<sup>&</sup>lt;sup>1</sup> This Policy Brief has been reviewed by the Philippine Institute for Development Studies, Department of Science and Technology Central Office, and College of Public Affairs of the University of the Philippines Los Baños.

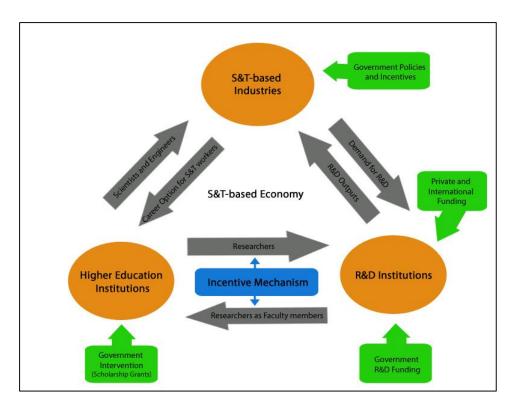


Figure 1. Incentive mechanism influencing researchers in the conduct of R&D (Adopted from the DOST's S&T-based Economy Framework as cited from the PCAARRD CorPlan 2012-2016)

the PCAARRD's CorPlan Framework is also anchored (Figure 1). The framework provides for the necessary interventions and the mutually beneficial relationships of PCAARRD, higher education institutions (HEIs), new S&T-based industries and research and development institutions (RDIs) to deliver strategic R&D outputs. To boost the core competencies of researchers from HEIs, PCAARRD provides for a highly competitive scholarship scheme across the country to support the very best students and stimulate greater flexibility and mobility of researchers and thereby effectively exploit research to respond to the demands of S&T-based industries. The collaboration within and across groups paves the way for excellent research base which secures the significant R&D funding to pursue the much needed technological advances. Policies which provide for a conducive environment for S&T development in both national and institutional levels are necessary.

Incentive mechanism has a critical role in influencing researchers to conduct R&D which are

essential to the AANR sectors. It values the unique strengths and capabilities of its partners. The framework recognizes that the HEIs and RDIs are the main sources of critical mass of researchers involved in the conduct of R&D. This study thus involves the analysis of the various policies governing these incentive mechanisms and how each of this incentive influence the effort of researchers to perform R&D.

### Scope and Data Used in the Study

The study covered a total of 46 institutions from HEIs and RDIs implementing DOST- and DOST-PCAARRD-projects during the period 2012 to 2015 (Table 1). Majority of these institutions are HEIs at 57% composed of both public and private universities and colleges. The participating RDIs are composed of government line agencies and international organizations. In terms of location, majority are from Luzon at 46% followed by Mindanao at 30%, and Visayas at 24%. The study employed three-level analysis: (1) national; (2) institutional; and (3) researchers, to assess the importance of honorarium in the conduct of R&D.

Table 1. General profile of participating institutions.

Institutions	Location			T-4-1
	Luzon	Visayas	Mindanao	Total
Higher Education Institutions (HEIs)				
Public				
SUC	8	2	9	19
UP System	2	1	1	4
Private University	1	1	1	3
Research and Development Institutions				
(RDIs)				
Government line agencies	9	6	3	18
International organizations	1	1	0	2
Total	21	11	14	46

The policies governing the conduct of R&D at the national and institutional levels were assessed. The institutions involved in the study were characterized to understand a wide range of factors affecting the behavior of researchers, particularly on incentive mechanism. This includes policies on the provision of honorarium, deloading or teaching load equivalency (TLE), merit promotion, and publication incentives. As many other factors can impact or interact with incentives, the technical and financial/administrative factors were also looked at. Technical factors include equipment and laboratory facilities, access to relevant literature and availability of technical advice, among others. Financial and administrative factors covered existing accounting and auditing policies, timeliness of budget releases, and changes in personnel and project leadership.

Secondary and primary data were used in the analysis. These secondary data/information include available project reports at PCAARRD and implementing agencies, research manuals and policies affecting R&D. Primary data were generated from actual and online surveys using structured questionnaire. Data were analyzed using both qualitative and quantitative methods. Qualitative analysis provides for a good narrative of the policy environment and perceptions of researchers on key factors affecting R&D using Likert scale. The quantitative behavioral model used ordinary least square (OLS) method. The model examines how the behavior of researchers, particularly in relation to exerting effort in doing R&D, is affected by various incentives available. Total research effort (TRE) is computed as the total

number of hours (combined official working hours and overtime) allocated by a researcher for all projects implemented in a given year for the period 2012-2015. In the model, TRE is regressed with behavior-motivating factors or incentives such as honorarium received by the researcher, budget of the project, publication incentive, and availment of deloading policy due to research, and selected socio-demographic variables such as rank and position classification. It is hypothesized that these variables contribute positively to research effort.

## Insight 1. At the national level, there appears to be a clear intent to encourage the conduct of R&D.

The national policies influence to a large extent the outputs of research. The Normative Financing scheme created through DBM-Commission on Higher Education (CHED) Joint Circular (JC) No. 2, s. 2004 provides for the basis of budgetary support to SUCs where research is one of the criteria together with general institutional support, quality teaching and extension services. The levelling of SUCs created through DBM-CHED JC No. 1-A, s. 2003 provides for the basis in determining the percentage score for the research component under the Normative Financing. CHED also confers Center of Excellence (COE) and Center of Development (COD) to HEIs in recognition of their excellent performance in instruction, research and publication, extension, and linkages. The conferment supports the accreditation of colleges to university status. CHED is mandated to promote, direct and support higher education institutions in performing their research and instruction functions. The National Higher Education Research Agenda 2009-2018 embodies the mechanisms developed by CHED to enable colleges and universities to produce high quality research that will advance learning and national development.

The Scientific Career System (SCS) was established within the civil service through Executive Order No. 784 s. 1987. It is a system of recruitment, career progression, recognition, and rewards of scientists. A researcher is conferred with the Scientist title on the basis of discoveries, inventions, major research papers, book articles, technologies developed, scientific findings, awards received, paper presentations, consultancy/technical assistance rendered, editorship of scientific and technological books, among others. Scientists are accorded with higher salary rates ranging from SG 26 to SG 30.

The *Technology Transfer Act* provides priority to R&D, invention, innovation, and their utilization by encouraging the promotion and transfer of R&D outputs. It establishes the means to ensure greater public access to technologies and knowledge generated from government-funded R&D. In addition, it provides incentives to institutions conducting R&D through the utilization of all income generated from commercialization of intellectual properties. The income is constituted as a revolving fund for use in R&D.

RA 8439 was created to provide for a program of human resources development in S&T to sustain the necessary talent and manpower to attain national development. This involves S&T managers, supervisors and planners, scientists, engineers, researchers, and DOST technicians and related personnel. The law provides for benefits such as honorarium, loyalty share, hazard allowance, laundry allowance, housing allowance, longevity pay, and medical examination.

Insight 2. At the institutional level, policies are not fully reflective of the national intent to encourage R&D. Interestingly, policies of the University of the Philippines (UP) system are more conducive for the conduct of R&D.

The translation of national policies to institutional level to persuade more researchers to be involved in R&D activities is as important to bring about an environment where all parties stand to gain from

the resulting choice. The institutions covered in the study have established policies to improve participation and motivation of researchers. However, some issues on implementation were also found.

Honorarium is generally applicable for externally-funded projects following the rules and guidelines of funding agencies such as the DOST Memorandum Circular (MC) 001, s. 2009 or the "Revised Implementing Guidelines on the Grant of Honoraria to Personnel Whose Services are Engaged by the National Science and Technology System". Among the HEIs interviewed, only few are able to provide honorarium for internally funded projects. These include Central Mindanao University, University of Southeastern Philippines, University of Southern Mindanao, Sultan Kudarat State University, Xavier University, and De La Salle University, among others.

Despite the legal basis to provide honorarium, disallowance was observed. The experience of Benguet State University, for instance, has made a considerable decline in the number of externallyfunded projects implemented in 2015 when the notice of disallowances for granting of honorarium to project leaders and staff were issued. A sharp decrease of 43% in the number of externallyfunded projects was observed. It should be emphasized that faculty and researchers provided extra time and effort to carry out project activities. It is thus reasonable to compensate the researchers for working beyond the prescribed working hours or workload which justify the provision of honorarium. The granting of honorarium must be viewed at as a fair incentive mechanism/system.

DBM-DOST JC No. 1, s. 2013 and subsequent GAAs stipulate the prohibition of giving honorarium for "special projects" beyond 25% of the employee's annual basic salary. DOST Secretary later clarified this through Administrative Order No. 010, s. 2010 which stipulates that the 25% cap pertains only to "special projects" and do not cover any and all other honoraria sourced from "S&T activities" beyond established workload. However, limit is still observed at University of the Philippines Los Baños, Nueva Vizcaya State University, Isabela State University, Pampanga Agricultural State University, and Department of Environment and Natural Resources Regional Office 10.

Deloading or Teaching Load Equivalency (TLE) exists for all HEIs. However, its availment is conditional. TLE allows the relief of teaching load in lieu of the performance of other functions such as R&D, administrative, and production. For administrative work, faculty members are automatically deloaded. However in the case of R&D, the approval is subject to absorptive capacity of the faculty, nature of courses being handled, and timing of approval of projects which should be prior to the start of classes. Given this scenario, it is not surprising to find that only 18% (36 researchers out of 199) were deloaded from doing research (Table 2). The policy appears to be a very limited incentive mechanism for the conduct of R&D.

Table 2. Number of faculty-respondents who availed of deloading or teaching load equivalency, 2012-2015.

Institution	No. of Researchers (n= 199)
Higher Education Institutions	
(HEIs)	
Public	
SUCs	20
UP System	13
Private	
Private universities	3

It is important to note that in general, one cannot be deloaded from teaching to conduct externally funded projects because this type of research is considered to be over and above the regular workload where honorarium may be availed of.

Publication incentive is provided to researchers to encourage them to publish their works. Table 3 presents the publication incentives among the surveyed HEIs. Used as a measure of achievement and productivity of a researcher, published scientific papers highlight the findings of R&D initiatives, contribute to the state of knowledge and promote advancement of science. However, it normally takes a long time before publication incentive is realized.

Merit promotion considers output from research for faculty positions under the HEIs where metrics for evaluating the research outputs through point system is in place. Outputs from research could be

Table 3. Publication incentive among higher education institutions, 2012-2015.

Institution	Incentive Per Publication (PhP)
Higher Education Institutions	
(HEIs)	
Public	
SUCs	5,000- 60,000
UP System	
Authors	65,000-80,000
Unit/Department/	15,000
College	
Private	
Private universities	10,000 – 15,000

in the form of publications, presentations to conferences/seminars/fora, patents, and trainings conducted and attended. For full-time researchers, whether they are from RDIs, SUCs, or UP system, merit promotion does not apply. They would have to wait for the position to be vacated to apply for higher position. Only then would their research outputs be of utility as they compete for the position. In this case, merit promotion appears to be a selective incentive system.

### Institutional Policies: The Case of the UP System

As the national university in the country, UP is not only considered as the premier institution of higher learning but is also the country's premier research university. Research and creative work are highly encouraged as manifested by the establishment of grants, awards, and incentive to encourage the conduct of R&D. UP allocates PhP 80 million for Emerging Interdisciplinary Research Program which is awarded to promising research groups working across disciplines to produce high quality publications and academic output. The university also provides for additional financial support to faculty and research personnel through Enhanced Creative Work and Research Grant mainly to encourage them to undertake research for publications, patents, and development of new software and advanced technologies. To support the presentation of output to international conferences, Research and Dissemination Grant is provided ranging from PhP 25,000 to PhP 45,000 depending on the location. Another program, the

Balik PhD Recruitment Program is aimed at recruiting Filipinos and foreign nationals with PhD and/or post-doctoral training from leading universities abroad to become UP faculty. The program provides for startup research grant of PhP 2.5. million and relocation allowance of PhP 0.5 million. The University has likewise come up with a UP Scientific Productivity System (SPS) to reward faculty and researchers in their scientific productivity and international scientific recognition. The titles of UP Scientist levels I to III are conferred to qualified scientists with monetary award of PhP 120,000 to PhP 180,000 annually. However, unlike the SCS which is a lifetime title, UP Scientists are evaluated every three years for retention/reappointment.

### Insight 3: Clearly, honorarium positively affects R&D effort.

Incentives that are designed to operate at the organization level must flow through to have an impact on the behavior of the researchers.

The profile of the surveyed 241 researchers is summarized in Table 4. Eighty three percent (83%)

are from HEIs and 17% from line agencies and international research organizations. Majority of the respondents are female (55%), faculty (75%), holding senior positions (68%), with PhD degree (56%), and for more than 20 years are employed in the institution (64%) and are involved in R&D (45%). At HEIs, the classification, whether a respondent is a senior or junior researcher, was identified based on the university rank. Senior researchers occupy the levels of University Professor down to Associate Professor while junior researchers hold the positions of Assistant Professor down to Instructor. Based on the number of years employed in the institution and involvement in research, the aging population of researchers can be implied. The 2012 study on R&D human resources by DOST revealed that 36% of the researchers in the country is at age bracket of 51 to above 60. This finding is very crucial as the demand for highly skilled workforce to perform R&D is increasingly becoming important to meet the challenges of today. Thus, there is a need for reward system or incentive mechanism to improve participation and motivation to conduct research.

Table 4. Profile of the researcher-respondents

Characteristics	HEIs	Line Agencies	International	All
Characteristics	(n=199)	(n=37)	Organization (n=5)	(n=241)
		Percent Reporting		
Gender				
Male	48	33	0	45
Female	52	67	100	55
Position Classification				
Researcher	10	100	100	25
Faculty	90	0	0	75
Rank Classification				
Junior	32	32	0	32
Senior	68	68	100	68
Educational Attainment				
BS	4	28	0	8
MS/MA	35	47	20	36
PhD	61	25	80	56
No. of Years Employed				
Less than 10	18	5	20	16
10 to 20	21	19	0	20
More than 20	61	76	80	64
No. of Years in Research				
Less than 10	35	22	0	32
10 to 20	24	19	0	23
More than 20	41	59	100	45

The perceptions of the respondents on the previously mentioned institutional policies aimed at motivating researchers to drive R&D productivity is shown in Table 5. Among the four incentive mechanisms, honorarium gained the highest percentage to positively affect research effort.

Table 5. Factors positively affecting research effort of researchers.

Incentive Mechanism	Percent Reporting	
Honorarium	94	
Deloading	77	
Merit Promotion	86	
Publication Incentive	93	

The importance of incentive mechanisms in relation to other factors affecting R&D implementation were likewise examined. Analysis revealed that technical factors such as availability of equipment/laboratories/facilities, technical expertise and personnel were very important. Established methodologies, availability of literature and scientific advice were marked important. When it comes to financial and administrative matters, timeliness of budget release, COA rules, accounting system, and rules on personnel were found to be very important. Among the incentive mechanisms, honorarium, promotion, and publication incentives were deemed very important. Honorarium is seen as the mechanism with the most direct and immediate impact.

The results of the behavioral model confirmed the a priori assumption that honorarium, budget, publication incentive, and rank and position classifications are statistically significant variables that affect the TRE of the respondents (Table 6). The positive and significant effects of honorarium suggests that researchers tend to devote greater research effort if the honorarium provided for the conduct of R&D is higher. Similarly, project budget also exerted highly significant effect. Researchers are influenced to devote more time to conduct R&D if mechanism to incentivize publication is in place even if takes a longer time to receive the benefits. The significant effects on rank and work classifications suggest that being senior translates to higher research effort. The result is logical as required by the position. Among SUCs, fullprofessors are required to devote 50% of their time while full-time researchers are expected to devote 100% of their time for research.

Table 6. Behavioral model for total research effort of researchers

Variables	Coefficient	Standard Error
Honorarium	0.007**	0.003
Budget	0.230***	0.023
Publication Incentive	0.359***	0.085
Deloading	0.069 <sup>ns</sup>	0.077
Rank Classification	0.207***	0.067
Position Classification	0.327***	0.079
Constant	2.962	0.296
Adjusted $R^2 = 0.282$	25	

<sup>\*\* =</sup> significant at 5% level; \*\*\* = significant at 1% level; ns = not significant

Given the various work and functions of researchers, the numerous activities to perform these functions compete with the use of researchers' fixed and limited time. It was found that on average, about 16 hours were devoted by a researcher in implementing a research project on a weekly basis. This is with considerable amount of time done beyond working hours and during weekends of about 7 hours.

### Conclusions

The findings indicate that the provision of honorarium is legitimate with adequate legal basis and can be viewed as compensation for the extra effort exerted by researchers. This incentive system is also effective as perceived by the researchers and as indicated by the results of the quantitative behavioral model. The national policy environment appears to encourage the conduct of research. However, such intent is not yet fully reflected in the policies of various institutions doing R&D and considerable variations on the interpretation of policies still exist even among similar institutions.

### **Recommendations**

R&D is a strong driving force to meet the challenges of today. We need to lure the great scientific minds to strengthen the country's scientific critical mass. Incentive mechanism,

particularly honorarium, can improve participation and motivation of researchers. Given the results of this study, the following are recommended:

- ✓ Advocate for increase appreciation among administrators and financial managers, including the Commission on Audit, on the importance of honorarium as incentive for R&D;
- ✓ Promote a common understanding and interpretation of policies affecting

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- honorarium for R&D such as 25% cap on honorarium;
- Advocate for the formulation of institutional policies, especially for HEIs, that will really promote conducive environment for the conduct of R&D; and
- Develop a mechanism that fosters an environment for instruction and research to complement each other (e.g. UP recognizes teaching and research as integrated functions).

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POLICY BRIEF highlights PCAARRD's stance on policy issues on S&T in agriculture, aquatic, and natural resources through the coordination of the Policy Advocacy Group (PAG). The PAG spearheads policy and advocacy related to PCAARRD Medium-term Plan.

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