

FACTORS OBSTRUCTING WOMEN'S PARTICIPATION IN SCIENTIFIC RESEARCH - VIEWED FROM GENDER PERSPECTIVE (AN GIANG PROVINCE CASE)

PHAN THUẬN*

TRẦN THỊ KIM LIÊN**

Scientific research is one the essential needs of women scientists in gender-equal society. However, the reality in Vietnam shows that women still face many barriers to participate in scientific research. The higher the level of scientific topics, the fewer opportunities women have. The article generalizes the current status of women's participation in scientific research, at the same time analyzes factors obstructing their participation from gender perspective, case studies of educational-training institutions in An Giang province. The result of our study shows that, women's participation in scientific research meets many barriers, from personal, family's barriers to the barriers of policy mechanisms, working environment...

I. On women's participation in scientific research today

As reported by UNESCO in 2006, women working in science only accounts for 27% of the total number of scientists in the world. However, this is only the average proportion, the actual gap between countries and continents is huge. For example, in Africa, this proportion is 29%. It is only 15% in Asia. In Europe, 32% of

staff in national laboratories and 18% of staff in private laboratories are females. That says, the proportion of women participating in scientific research in the world is still modest. In addition, the proportion of women scientists awarded scientific prizes,

(*) MA., Academy of Politics and Public Administration Region IV.

(**) MA., Deputy Director of Social Sciences and Humanities Research Center, An Giang University.

especially Nobel – the most prestigious scientific prize, is even more modest. (cited from L'OREAL Vietnam, <http://www.phunutrongkhoahoc.com/home/index.php?...>).

In Vietnam today, women have been participating actively in social life in many different fields, one of which is scientific research. Many women scientists have been assigned to leadership and management positions in scientific research agencies and institutions. Many women scientists have also participated in scientific researches with many inventions, innovations, improvements and applications. Those provide high efficiency to production and business as well as life, contribute to improving labor productivity, increase wealth of the society and improve life's quality. That has helped to build a certain position of women in modern society in general and in scientific research in particular, changes prejudices about women's role in society. Some researches have acknowledged that the current female staffs in research institutions, universities and academies have high qualifications. Thus, they have favorable conditions to participate in scientific research (Luu Phương Thảo, 2002; Nguyễn Đình Tấn, 2007; Nguyễn Thị Tuyết, 2003 and 2007; Lê Tuấn, 2011; Ho Chi Minh National Academy of Politics, 2006).

Even so, the proportion of women engaged as head of research at all

levels remains limited. The higher the research level, the proportion of female head of research is lower. 37.5% of ministerial-level researches, 27.8% of state-level researches and 11.1% of test manufacturing projects are headed by females (Nguyễn Thị Tuyết, 2007, tr.50).

Some researches have shown that, suitable mechanisms, policies coupled with their own efforts as well as the support of the family are factors boosting women's participation in scientific research (Nguyễn Thị Tuyết, 2003; Nguyễn Thị Bích Thuận, 2012; Ho Chi Minh National Academy of Politics, 2006). However, in current reality, women scientists engaged in scientific research still face many difficulties. In particular, works and family pressure and lack of family support are significant barriers which make women's career in scientific research increasingly arduous (Nguyễn Đình Tấn, 2007; Nguyễn Thị Tuyết, 2007; Trần Thị Vân Anh and Trần Thị Lan, 2010).

II. Factors obstructing women's participation in scientific research

In fact, scientific research is a difficult job for both men and women. However, women face more difficulties when engaging in scientific research. Our reality research in educational-training institutions in An Giang province^(*)

^(*) The article based on the results from our study in An Giang province in May 2014. See: Trần Thị Kim Liên (Chairman) (2014), Factors affecting

will further clarify this issue.

An Giang province now has 1 university, 3 colleges and 1 vocational college. Total number of female staff holding master's degree or higher (so-called female scientific staff, or referred to as female staff) working and collaborating with these institutions is over 120 people. The survey for the study was conducted by questionnaire for these 120 female staff and 15 in-depth interviews were conducted for both male and female scientists (including some leaders of schools) at universities, colleges, vocational colleges in the province. The quantitative study aims to help women identify the barriers to their participation in scientific research. At the same time, the quantitative results from in-depth interviews are to clarify the similarities and differences in gender perspective in terms of identify barriers for women to participate in scientific research. From these results, we have found that, women's participation in scientific research today still faces the following barriers:

1. Inferiority and smugness

The survey results show that, 44.5% of female staff acknowledge that, inferiority is the barrier limiting their participation in scientific research. The quantitative data is consistent in

showing that, some women still have inferiority complex, afraid of difficulties, satisfied with what they have, do not have the spirit to strive. The difference between men and women does not depend on the capacity and level, but relates to the scope of operation and reputation. Women are often not confident in scientific research, do not completely overcome social prejudices. This leads to the difference between women and men in scientific research as well as in management and leadership.

Besides having inferiority, smugness, satisfaction with life, most of men's comments show that, lack of passion is also a factor limiting women's participation in scientific research. Many female staffs avoid research activities, do not actively collaborate in researches for many different reasons. It is difficult to pursue scientific research without passion. In contrast, if they have passion, all difficulties and obstacles will not be barriers to them on the path to science.

In addition, the majority of men surveyed say that, many female staffs have difficulties in scientific research due to women's traditional habits – they are very discreet and cautious in relationships, which limits their opportunities to approach and participate in research projects. However, this could be a subjective judgment, the research evidence from quantitative data and comments from

women's participation in scientific researched in education-training in An Giang, Scientific subject of project "Capacity building in scientific research for female staffs" funded by UNDP.

in-depth interviews with female in our study does not show it.

Thus, there is a difference from gender perspective in evaluating barriers to women's participation in scientific research. More than half of female staffs do not think inferiority, smugness are barriers to their participation in scientific research while all men acknowledge this.

2. Maintaining work-family balance

The previous studies have acknowledged that, women often face many difficulties from work and family pressure when participating in social activities. Our findings in An Giang province study also show similar results. When being asked, up to 91.6% of women scientists said that women always have difficulties in balancing work and family. Also, 94.1% of respondents answer that family affects their scientific research activities. In which, "high influence" accounts for 49.6%, "light influence" accounts for 44.5%.

The study also analyzes this difference by marital status. The result shows that, married female staffs say family highly influences their research activities, accounting for 57.0% compared to 32.2% of unmarried female staff. Respondents who answer "low influence" are 36% of married female staffs and 64.5% of unmarried female staffs. This reflects the difference in terms of family's influence by marital status. Married female staffs are those

taking responsibility of childcare, housework and other household chores etc. – things that occupy a lot of time – while unmarried women do not have much burden.

The fact shows that, family is always a significant barrier for women to participate in social activities. When dividing household labor, women are assigned with housework, child care etc. by default. "Therefore, the similarities of millions of women are they have to cook, wash dishes, take children to school, as the years go by, they 'end up having nothing left'" (Barbara Kellerman and Deborah L. Rhode, 2009, p.71). Under the perspective of most men interviewed, there is a general perception that, family influences on women when participating in scientific research, however, the extent is not too great. There are also some opinions that, men themselves also find it hard for women to research while fulfilling their "natural role". Pursuing career, passion for researching can sometimes lead to the risk of family breakdown. Therefore, very few people dare to trade off their family happiness for participation in scientific research. Thus, these opinions express agreement and empathy with female staffs when they do not participate in scientific research.

Overall, the evidences of quantitative and qualitative researches show, family is one of the factor influencing

women's participation in scientific research, the extent of influence depends on the circumstance and perspective of each individual.

3. Investment mechanisms, policies for scientific research in the region is not appropriate

According to the survey results, 75.5% of female scientists say that the unattended investment mechanisms, policies for scientific research are the barrier making their scientific research activities more difficult. Up to 55.6% of female staff interviewed say there was no specific policy, mechanism in their agencies or units to help female staff to participate in scientific research. Consistently with this evidence, most comments of in-depth interview with both male and female admitted that at the present universities, colleges, vocational colleges in An Giang province do not have any supporting program or policy for women's participation in scientific research. Even if there is, it is only in some forms of reward, but still quite limited.

The survey results also show that, 72.3% of female scientific staff said it lacks of infrastructure investment, 70.6% said unsatisfactory level of investment in science is also one factor making it difficult for women to participate in scientific research. Working environment and conditions also have certain impact on scientific research activities. An environment

that does not consider scientific research a vital activity, does not have adequate investment in research means that scientists' opportunities to participate in scientific research will be severely limited.

All answers agree that, current units do not have specific policies to encourage female staff to participate in scientific research. 22.8% of female staffs are not satisfied with encouraging, supporting policies. Among them, most said most of encouraging, supporting policies are just for show.

4. Settlement regulations are still cumbersome, complicated, budget for scientific research is still limited

Cumbersome, complicated settlement regulations seem to be the common situation for current scientific activities. Survey results show that, 67.2% of respondents said that inappropriate settlement regulations, procedures are factors making it difficult for scientists in general and female scientists in particular to participate in scientific research.

According to some opinions from in-depth interviews, sometimes the research product has been completed long time ago but has not been paid. Besides, "the funding to implement a grassroots topic is only about 30 million but it is regulated to implement in a wide range, the chosen sample size must be large ... With such tight budget, it is very difficult to ensure the quality of research product. Therefore,

it is understandable that many female staffs do not want to participate in the research”.

5. Mechanism for evaluating female staff's capacity have not been paying attention

Some other findings in the results of our research relate to staff evaluation. 60.2% of female staffs say that unattended capacity evaluation mechanism for female scientists is one of the barrier to their participation in scientific research. Another quantitative evidence also reinforces this finding: 63.8% of scientific staffs say their agencies, units do not take scientific research criteria for staff evaluation and promotion. Achievements and dedication in scientific research have not been reviewed, evaluated, considered during staff promotion. 48.6% of female staffs in An Giang University agree to this statement. Besides, for female staff specifically, they normally stop at the position of department, faculty staff, and usually only in the deputy positions.

That says, there is still gender prejudice in capacity evaluation of female staff in many areas, and evaluation mechanism in scientific research and management for female staff is still inappropriate.

III. Conclusion

Thus, both of our quantitative and qualitative evidences in An Giang

province shows that, in scientific research, women still face many barriers, from subjective barriers from themselves to objective barriers related to family, policy, working environment... From gender perspective, the research results show that there is a consensus of opinion in both sexes on some barriers that female scientists have to face. However, the research also shows that, there is gender difference in the recognition of the impact of barriers to women's participation in scientific research in An Giang. Some men seem to still having preconceived attitudes towards women, while others show sympathy and share with women in scientific research.

Therefore, to create opportunities to participate and develop women's scientific research ability, our research proposes a number of solutions as follows:

- Leaders of schools, agencies, units in An Giang province need to *recognize, evaluate properly* the role of women scientists in scientific research activity of the unit to increase the proportion of female staff's participation in scientific research, at the same time, give female staffs opportunities to learn, foster knowledge and improve level.

- *Give opportunities to female staffs to actively choose working time when participating in scientific research.* Giving them opportunities to set their own working hours when participating

in scientific research will help them balance time for teaching, for research and for family, giving them opportunities to participate in scientific researches. Accordingly, the units need to develop specific working regulations for staffs who do not only research but also teach. For example, if they participate in scientific research, their teaching hour will be reduced; when the staff proposes appropriate plan, school leaders can assign substitute person to teach.

- *Actively propagating to change gender prejudice.* Accordingly, on one hand, it is needed to propagate, educate so women in general and female scientific staffs in particular become confident in their own capacity, overcome gender prejudice. Besides, it is needed to propagate to change men's mindset about dividing household chores, helping women have more time for science.

- *Promoting passion for science.* First, it is needed to set the example of female scientists with high achievements in scientific research; propagate to make female staffs to fully aware the significance of scientific research for themselves and for society. Besides, it is needed to create favorable scientific environment for scientists in general, at the same time, hold various scientific research forums, clubs. Activity types need to be diverse and changing. Besides, it is needed to pay more attention to

funding for scientific research, helping scientists in general and female scientists in particular to raise income and improve their lives. If being done well, these things will give scientists in general and female scientists in particular excitement and passion for research □

References:

1. Trần Thị Vân Anh, Trần Thị Lan (2010), "Role of women in leadership and management", in: *Summary record of Scientific Conference "Vietnamese female intellectuals in the industrialization and modernization of the country"*, Vietnam National University, Hanoi.
2. Barbara Kellerman and Deborah L. Rohode (2009), *Women and Leadership*, Đồng Nai Publishing House, Đồng Nai.
3. National Academy of Politics (2006), *Promoting the role of Vietnamese female intellectuals in the period of renewal*, Ministerial-level scientific topic.
4. Trần Thị Kim Liên (Head) (2014), *Factors affecting women's participation in scientific research in education-training in An Giang*, Scientific topic of the Project "Capacity building in scientific research for female staffs" funded by UNDP.
5. Nguyễn Đình Tấn (2007), "The role of female intellectuals in

- industrialization and modernization”, *Journal of Family and Gender Studies*, no. 2.
6. Lư Phương Thảo (2002), “Women in scientific and social research – advantages and disadvantages”, *Journal of Sociology*, no. 2.
 7. Nguyễn Thị Bích Thuận (2010), “The role of women in education and training”, in: *Summary record of Scientific Conference “Vietnamese female intellectuals in the industrialization and modernization of the country”*, Vietnam National University, Hanoi.
 8. Lê Tuấn (2011), *Removing barriers to female intellectuals’ development*, <http://www.tapchicongsan.org.vn/Home/Tri-thuc-viet-nam/Tri-thuc/2011/11978/Go-bo-nhung-rao-can-de-nu-tri-thuc-phat-trien.aspx>, accessed on 12/3/2014.
 9. Nguyễn Thị Tuyết (2007), “Female university lecturers and scientific research”, *Journal of Family and Gender Studies*, no. 4.
 10. L’OREAL-UNESCO. http://www.phunutrongkhoahoc.com/home/index.php?option=com_content&view=article&id=6: tinh-hinh-ph-n-trong-nganh-khoa-hc&catid=1:thong-tin-chung&Itemid=5, accessed on 12/3/2014.