

Income Generation Activities among Academic Staffs at Malaysian Public Universities

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Abstract

Income generation activities have been acquainted among public higher education institutions (HEIs) in Malaysia. Various factors that brought to insufficient of funding caused Higher Education Institutions(HEIs) to seek for additional income as to support the operation expenses. Financial sustainability issues made up the significant impact towards HEIs. Through the different instruments adopted by HEI, perhaps academic staffs are one of the parties that in charge of the income generation at universities. This research employed qualitative method by conducting interviews as a medium to provide insights to researcher. Then, the interviews data are analysed using the Interactive Model. The results pointed out that the main income generation activities originated from the research and consultancy whilst commercialization contributed the most significant income towards university. As a conclusion, the income which generated by the academic staffs is at upmost important to the development and sustainability of a university. Perhaps this research is significant to those who are concerning on the issues of income generating activities arisen among academic staffs. Through the results gained, certain parties may get known to the root of problems and then, solve it. It will eventually help the university to get a better way in order to attain the optimal results in income generation.

Keywords: income generation activities, public universities, academic staff

1. Introduction

The public universities in Malaysia are funded by government and acted as self-managed institutions under the Universities and Universities Colleges Act 1971, whereas the private universities and university colleges come under the Private Higher Education Institution Act 1996 which confer their own degree and provided tertiary education to the students (MoHE, 2009). The higher education institutions funding constitute of 90 percent of government funding and the rest of 10 percent is come from the students' fees. Today, there are a total of 20 public universities, 40 private universities and University College, 5 branch campuses of international universities, 25 polytechnics, 39 public community colleges and 470 private colleges (Kasim, 2011). Among all the public universities, only five universities are known as Research Universities (RUs), which are able to acquire additional funding for the purpose of R&D and commercialization of research. The remaining will be the Comprehensive Universities (CUs) and Focused Universities (FUs). Every year, certain amount of budget will be allocated to public universities for the purpose of research and teaching, development and also for operation expenses. However, to shore a university is never a simple mission. This shows that the total expenditure of the university can be huge and astonished. Other than that, the maintenances and upgrading of new facilities even cause more expenses to the university. From the aspect of government funding, it still represent a very large portion of financial support to the daily operation of a university. However, the issue of searching of alternative income has arisen. This is to ensure that the sustainability of a university can be maintained without over-relying much on the government funding. Hence, there comes the responsibilities of staffs in the university, but only academic staffs will be determined in this research.

As stated in the National Higher Education Strategic Planning, the governance Critical Agenda Project (CAP) is to encourage the public Higher Education Institutions (HEIs) to move toward an autonomous system of governance included in the areas of finance and wealth generation, human resources and academic administration. When the HEIs are bounded by the government, they get restricted to acquire income in diversification methods and fail to manage their own internal financial system. In order to be a major

contribution to the economic and development of society, the university must be transformed to be a more research-driven institution (Oliver et al., 2013). This is to generate additional income for self-usage at university, while boosting the economic in local country. Therefore, additional income can be contributed to the institution no matter through the activities of research, consultancy, commercialization and so forth. Furthermore, the public universities are required to innovate in order to deal with competition and diminishing capitation fees from the Treasury (Rodrigues et al., 2006). This is conforms to the funding allocation occurred in Ministry of Finance Malaysia.

Indeed in the first phase of National Higher Education Strategic Plan started from 2007 to 2010 which build up the foundation for HEIs. The FUs or CUs are able to gain 15 percent of operating expenditure whereas those RUs able to gain five percent extra. Then, the phase two is started from 2011 to 2015 where is to improve and strengthen on the transformation of higher education. From there, the FUs or CUs gained an increase of five percent in their operating expenditure whilst RUs is gaining 25 percent of operating outlay and also an additional five percent expenditure on development. It is then followed by the third phase where the plain is aimed to achieve excellent in higher education by providing the 25 percent of operating expenditure and additional five percent of development for both CUs and FUs. On the other hand, RUs is gaining as much as 30 percent of expenditure outlay and 10 percent of development from the internal resources (MoHE, 2007). It is actually the sharing from the fixed amount of financial resources even though the amount of funding has been increased in every phase. In fact, every HEI is receiving lesser amount with the increased number of published universities within the years

The research objective of this study is to identify the types of activities carried out by academic staffs for the purpose of income generation.

2. Literature Review

As proposed by Odundo and Rambo (2013) in Kenya, Resource Dependency Theory (RDT) is applied to describe the behaviour of education institutions to start up business enterprises for complementary income to ensure their survival. The characteristics of the theory as resource dependency is the need of obtaining resources, in terms of financial, physical or information, from the environment caused the institutions to be depended on the external sources of resources. The RDT is suggesting the institution is able to minimize the reliance towards the external resources by merger or diversification, boards of directors, joint venture and other interorganizational relationship, political conduct and executive succession (Hillman et al., 2009; Thompson, 1996). It same applies to the higher education institutions.

Meanwhile, the Agency Theory is used to describe the contractual relationship between two party, which one party (the principal) deputy the work to another (the agent), who to perform that work (Jensen & Meckling, 1976). Yet, two problems may arise in the relationship, which is conflict occurs on targets of the principal and agent and the difficulty to measure on agent's performance. According to Ahmad et al. (2012), the university on behalf of the principal position prescribed to provide information about the Key Performance Indicators (KPIs) to the MoE as to evaluate the university performances by the academic staffs.

2.1 Funding Higher Education Institutions (HEIs)

As defined by Wächter et al. (2012, p. 26), higher education is the cohering to the "principle of borderless generation, dissemination and look for/of novel and comprehensive knowledge". Here, it has been controlled by government and primarily funded by the state or other public authorities since it is acknowledge as the national key assets. Other than government funding, a university can acquired different sources of funding to the extent of how the sources could impact on their financial structure. Furthermore, the other sources of funding for a university will be the students and household fees, and also from other private institutions (Jongbloed, 2004).

Meanwhile, Herlitschka (2008, p. 24) defined sustainability as "the ability of an institutional to uphold an activity without quality lost and by using appropriate resource into the future". However, all the public universities undergo the reduction in financial allocation due to the reduction of government expenditure in 2010 onwards as a long-term effect of financial crisis (Asia, 2012). So, sustainability in terms of financial for a university plays an important role in order to maintain the ordinary operation in the future. The higher education institutions have to strive to lower their vulnerability to uncertainties in income sources and resource providers' effects. They have to shift from single revenue resources to prevent the planned activities from getting restricted due to the control from the main funding sources, through the aspect of revenue inconstancy, changes in structure and process and also target displacement (Froelich, 1999).

According to Jongbloed (2004), the governments and university leadership make use of funding as a component

of governance instruments adopted. Therefore, funding is more than what it meant by resources distribution to the institutions. The funding allocation is perceived as the most effective and the only science policy equipment available (Nieminen, 2005). However, not much attention and explores are paid on the relationship between what the universities had done in terms of teaching and research quality together with the way they are being funded (Beath et al., 2007).

A university can acquire different sources of funding to the extent of how the sources could impact on their financial structure. As showed in Figure 1, the main source of funding for a university will be the government, students and household fees, and other private institutions. The government funding comprises of operational grants, research grants and capital investment, whereas the students fees including tuition fees and other ancillary charges. Lastly, the private institutions resources included private donations, gift and charges for consultancy, patents and any other services (Jongbloed, 2004).

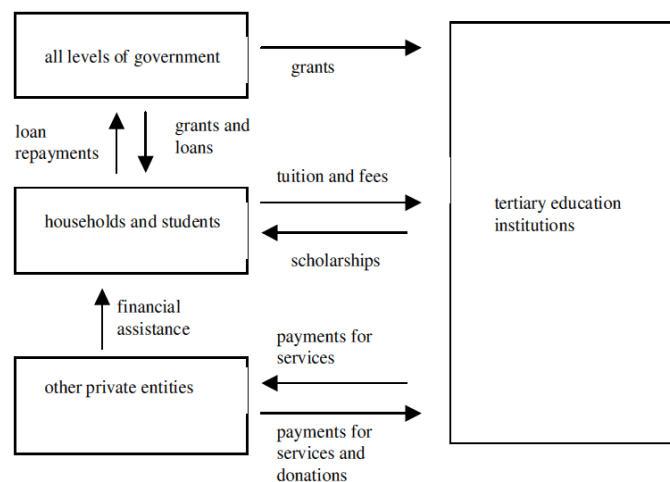


Figure 1. Funding resources flows to and from tertiary education institutions (Source: Adopted from Jongbloed (2004))

In developing countries, the state government is employing different approaches in allocating the fund to their universities, which it can be the negotiation-based approach, performance-based approach or formula-based approach (Jongbloed, 2001). The performance-based approach is the mechanism of funding to the extent of which grants to universities are based on their performance. This is to ensure competition and quality among the HEIs within a country (Jongbloed & Vossensteyn, 2001). The performance-based type of funding indicated that HEIs receive the fund based on the 'taximeter' system. For example by linking directly to the amount of students passing their examinations, number of degrees awarded, issued of patents and licenses or volume of research publications (Frølich et al., 2010; Jongbloed, 2001).

2.2 Income Generation Activities

Every university is an output of different process of economic and intellectual up growth, they have to find out equilibrium between teaching, research and extensive range of income-generating activities. And now, the government is pushing the universities to be in an entrepreneurial paradigm due to many external overwhelming forces (Gibb & Hannon, 2006). Hence, the university is responsible to raise the income from non-funding institution as to prevent the compound administrative terms and conditions along with the public funding by government (Wächter et al., 2012).

A review of empirical studies concerning the impact of economic crisis on higher education by Asia (2012) shows different cost-saving methods carried out by most of the universities in Malaysia including all the reduction in travelling expenditure, research grants, students; activities fund, wastage and delay in infrastructure development. Some universities are even developing innovative and entrepreneurial activities to generate extra income. There is also US foundation sectors offer large philanthropic in the form of grants to the education sector in Malaysia (Nahan, 2003).

According to Siswanto et al. (2013), the academic-oriented income generation is merely generated through ways

of teaching and education services. So, they are able to fully utilize their knowledge and experience by immersing into the income generation activities. Likewise, the academics are now transformed to be researchers rather than lecturers (Kasim, 2011). They are anticipated to publish articles and books to keep assuring the external sources in the forms of research grants. Furthermore, Beath et al. (2000) mentioned that incentives may be offered to the academics who had conducted income-generating activities by applying optimal “tax” on the earning income, whereas Mankiw et al. (2009) argued that optimal tax rate should be implemented with respect to the distribution of ability.

The university has another objective, it is to initiative and engaged in the business boundary to improve skill levels amongst the employees and facilitate knowledge transfer. In order to reduce the reliance towards grant funding, the university is responsible to raise the income from non-funding organization (Estermann & Pruvot, 2011). However, the impression and position of a university will be judge by public by glance through the quality and nature of the teaching and research done by the academicians (The Guardian, 2010). From this perspective, it causes a critical issue to certain universities when the scarcity of experienced academic staffs becomes an encumbrance towards a university to generate income from the researches and consultations as well as commercialization activities (Gebreyes, 2010).

Table 1. Summary of income generating activities carried out by academic staff at HEIs

Author (s)	Income-generating activities
Albrecht & Ziderman (1992)	Short ad-hoc vocationally oriented courses, applied contract research (industry) and consultancy.
Guang (2011)	Tuition fees (contract with private sector) and provision of service.
Kassel (2011)	Teaching and training opportunities (presentation and workshops), conferences, meeting and full-length courses.
Kiamba (2004)	Pure consultancy, specialist-based production unit, general production unit, seminar, workshops and short-courses.
Siswanto et al. (2013)	Education, research and community services.
Todericiu (2009)	Private companies, fundraising through scientific research, sponsorship, education with tuition fees, and funding from European projects.
Wächter et al. (2012)	Contract with private partners, philanthropic funding, provision of service, consultancy facility-related services.
Wedgwood (2006)	Contract research, consultation, R&D (linkages with industry).
Molas-Gallart et al. (2002)	Technology commercialization, entrepreneurial activities, advisory work and contracts, research, teaching and communication.

Molas-Gallart et al. (2002) argues that universities are alert of that they are existing in the lower pay levels of academia; they normally do not execute audits intrusively on the non-academic activities in their faculties. This made up of the “don’t ask don’t tell” principle as a practice. Indeed, the capabilities of a university in analysing third stream income-generating activities constitute of different means, which can be technology commercialization, entrepreneurial activities, advisory work and contracts, and facilities commercialization.

Income generating activities is meaning a set of small-scale projects which able to create source of income to the individual beneficiaries or groups, on the other hand promote the rights to self-determination, repatriation and integration (UNESCO, 1993). Based on the information that collected from previous studies, most of the HEIs academic staffs are more likely to involve in the research and development (R&D), consultation and commercialization activities in order to generate income for the universities. Furthermore, the academic staffs in HEIs also provide variety of courses purposely to attract more students to further their studies in distinct field; meanwhile expand the income streams for the university. As proposed by the Asia (2012) in Bangkok, many universities in Malaysia are developing innovative and entrepreneurial activities to generate additional income. In Figure 2, it showed that 84% of the universities are implementing consultancy activities to generate their income and it is then followed by the increased of post-graduate programmes, short-term professional development programmes, continuing studies programmes and off-shore programmes in the local universities. There are also half of the responded universities generate their income by offering entrepreneurship programmes

and gain profit through corporate or private entities and enterprise units.

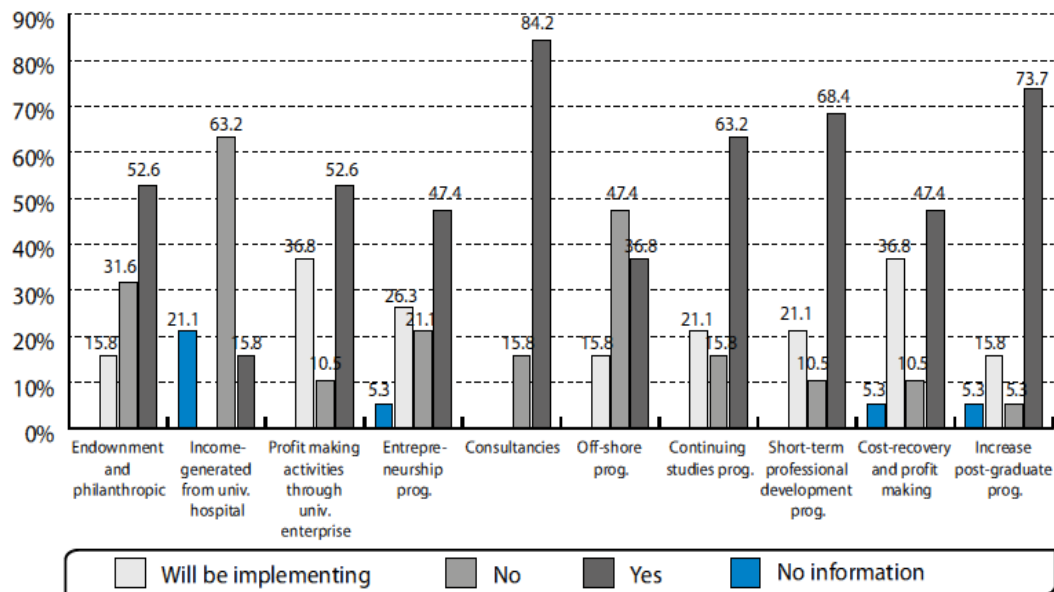


Figure 2. Types of income generating activities implemented in public universities in Malaysia (Source: Adopted from Asia (2012))

On the other hand, commercialisations are easier to handle and allocated without delimitation internally compared to other types of income-generating activities (Wächter et al., 2012). However, the academic environment is quite important in the process of cultivation and provides support to the commercialization activities without compromising core academic value. There are also US foundation sectors that offer large philanthropic in the forms of grants to the education sector in Malaysia (Nahan, 2003).

From the research done by Ahmad and Farley (2013), the international students' fees contributing to the funding of a public university other than the 10 percent of local students' fees from the sources of funding. With the increase in international students' enrolment, the public universities form another income generation sources when other countries' students perceived that the education fees in Malaysia is not high compared with their own country. Hence, public universities should modify and further improves the contents of their courses to fancy those international students who originally conceive good image towards Malaysia.

According to Siswanto et al. (2013), the academic-oriented income generation means the income is merely generated through ways of teaching and education services. Certain academic-based business units can be developed which deliberately providing science and technology-based products which are used for academic purpose.

Likewise, the academic staffs are now transformed to be researchers rather than lecturers (Kasim, 2011). They are anticipated to publish articles and books to keep assuring the external sources in the forms of research grants. The academic staffs are advisable to fully utilize their slack capacity to generate additional income. The slacks capacity may refer to the staff hours which not in use and is paid in the salary (Nielsen, 2009). As proposed by Yusof and Jain(2009), there should be some academic staffs which act as leaders that behaved entrepreneurially to others. This is because the entrepreneurial leadership behaviour can indicate an obvious enabler when they are able to exert their entrepreneurial mind set, cogitation, channel and potential. Apart from that, the entrepreneurial mind set can be instilled towards the academics via the innovative teaching and advisory activities. They should also comprehend and identify the market demand before a research is assured to generate research output as part of generating income for the universities.

Academic staffs perceived that the third stream income-generating activities are separated from mainstream academic activities and have financial as well as business values (Wedgwood, 2006). Those third stream activities are comparatively liable to be quantified and controlled in terms of financial flows as an indicator

(Kasim, 2011; Molas-Gallart et al., 2002). Hence, it is very usual for academic staffs to conduct extra-academic activities based on individual preferences at the universities.

As proposed by Beath et al. (2000), universities may offer incentives to the academics who had conducted income-generating activities by applying optimal “tax” on the earning income despite of determining the four conditions. Amongst the four conditions, the most influential will be the researchers’ output in fundamental and applied research and also the academics’ intrinsic interest. Mankiw et al. (2009) argued that optimal tax rate should be implemented with respect to the distribution of ability.

3. Methodology

In this research, qualitative approach is selected because it is useful to study the significant differences in challenges faced by academic staffs when they carried out the activities of income-generating. It also enables the researcher to read and engage with information critically but also to learn to discriminate and refine out the essence from the large body of information (Braun & Clarke, 2013). By using qualitative approach, deeper understanding and insights on the types and challenges of income generating activities can be furnished to the researcher.

The sampling method employed in this research study is purposive random sampling. The criteria chosen is to study only on those academic staffs who are truly conducting the income generating activities at the university amongst all the staffs at University XY; this is to ensure that the target respondents are well fit to the requirement precisely. The total sample size of six participants which randomly selected from the name list provided by the Research Management Office from University XY. A face-to-face and semi-structured interview that last for an hour is conducted. Moreover, a set of open-ended questions is asked during the interview sessions to reveal as much details as possible.

In this research, the primary data is analyzed by using the Interactive Model to transform raw data into a structured and organized formed of data. It included the steps of Data Reduction, Data Displays, and Conclusion Drawing and Verification.

4. Results and Discussions

The purpose of this section is to discuss the results obtained in order to achieve the research question one which is to identify the types of activities carried out by University XY academic staffs for the purpose of income generation.

From the research, it reveals that research, consultation and commercialization activities are the most common income generation activities occur at University XY. This is mentioned by Respondent E who is one of the engineering based professors. However, not many academic staffs are qualified to be involved in commercialization because products produced mostly are in form of social science from certain faculties rather than the actual products which have commercial value. This has to be improved to look for more income streams since consumers from commercial activities are potential to be the revenue providers (Froelich, 1999).

Besides, most of the respondents also agreed that the levels of income generation activities participated by University XY academic staffs are still low and not optimism. This can be improved when academic staffs are free from working hours or as not stated in the salary payment. The additional participation by the academicians in income generation activities is meant so much to a university in strengthening the financial support. So, various types of income generation activities should be promoted to the academic staffs that are yet to be involved in it to contribute to the university. This is correspond to the previous study by Nielsen (2009) and mentioned that academicians are advisable to fully utilize their slack capacity by starting to involve in certain income-generating activities to make contribution towards the university.

On the other hand, the research points out that income generation activities are very important to ensure the sustainability of university even though University XY is still new in the income generation activities which may not be able to generate as much income as other established public universities, which have joined those activities long time ago as stated by Respondent C. Hence, the additional income that acquired by the academic staffs are vital in supporting the functional and operational activities as to reduce the financial burdens endured by university rather than heavily relying on government. This is because all the public universities are facing the reduction in financial allocation in 2010 onwards due to the effect of financial crisis (Asia, 2012). Therefore, the ability of a university in generating income towards owns operations are very essential due to the issue of financial crisis arisen globally.

According to Thompson (1996), Resource Dependency Theory suggesting that institutions including higher education institutions are able to minimize the dependency towards main external resources through joint

venture, mergers or diversification of income with other external organizations. From the research, it explores that there are also academic staffs that collaborated with outer organizations to gain the experience and also generate income towards University XY through completing certain projects as mentioned by Respondent C. From there, it will help the academic staffs to gain the real working experience with outsiders by fulfilling the counterparts' requirements in order to complete the distinct projects that required different field of knowledge respectively.

With the achievement of academicians in income-generating activities, perhaps University XY is able to manage its own financial system by allocating different portions of fund to various programs or to support students' activities also. This is conform to the previous studies which done by Estermann et al. (2009) and mentioned that, universities that undergone income-generating activities actively are more flexible in managing their internal financial. So, there goes the benefit that University XY can obtain through the effort contributed by academic staffs.

Apart from that, the result shows that certain amount of incentives given in the profit sharing basis is motivating the academic staffs in further involved in income generation activities. This is very encouraging because self-achievement and desire for extra personal income can be the driving forces towards individual academic staffs to attain the goal in their teaching life. The previous study of Beath et al. (2000) further explained that 'optimal tax' rule may be applied to those academics who are involving in income-generating activities by providing incentives based on their output in fundamental or applied research and intrinsic interest.

Furthermore, from the research, it explores that all the respondents agreed to the extent that autonomy of oneself to ease those academic staffs in the activities of income generation is another motivator. For instance, the autonomy for an academician in negotiating the commercial products in terms of price and contracts details as mentioned by Respondent D.

"...in terms of freedom of negotiation, the researcher should be given more freedom to negotiate directly with the interested parties. Because some industries they do not like the complicated intermeddle from third parties especially when negotiating about the product price..."

The autonomy granted by university management enables academicians to smooth out the process when dealing projects with the external parties who are interested. This is due to the reason all of the procedures are taking time to get approval from university when it is stated compulsory to pass through the administration level. At the end, the probability of that project to be carried out successfully will be lower because other academicians from another university may grab it before University XY. Besides, the granted autonomy is to ensure that the academicians possess the authority during decision making and resolving the conflict as immediate when certain issues arisen in accordance to the rules and regulations stipulated by the university.

Meanwhile, some of the respondent agreed that the action of collaborate with developed countries and universities can help to obtain more funding to the university by completing certain projects or international conferences as stated by Respondent D:

"...outside countries could also help the developing countries. Like in the public university, the researchers have to take effort to apply to work with the overseas universities to form collaboration in order to get the fund from local or international..."

As conclusion, the university management plays an important role in determining the successfulness of a university to acquire other sources of funding to support its own operations. Therefore, a comprehensive and enduring strategy should be plan carefully based on objectives of university to maintain the stable financial income.

5. Recommendations

In this section, recommendations are given as to enhance in getting the results. There are three parts of recommendation will be discussed, which are the recommendations for University XY to maximize the results gained in income generation activities, recommendations for Ministry of Education and also recommendations for the future research.

5.1 Recommendation for Ministry of Education (MOE)

From the result gained, the Ministry of Education is recommended to grant the full autonomy to every public university in Malaysia in order to enhance the way of higher education institutions in obtaining additional funding. This is because those institutions with fully autonomy are discovered to be more active and diversified in their funding resources compared to those institutions which are not as mentioned by de Dominicis et al.

(2011). Adequate monitoring from the Ministry side is enough so that the higher education institutions are freely from collaborate or obtain financial assistances from local or overseas organizations.

5.2 Recommendation for University

As mentioned in the Agency Theory Model, the university is playing an important role and possesses high responsibilities in providing satisfied conditions for the academicians to accomplish continuously in the income generation activities so that more income can be generated towards the university to achieve sustainability. Even though both parties are having their own interest, a clear communication between the parties involved and an appropriate strategy implementation will make the differences in final results. Hence, a comprehensive policy should be altered by looking at different perspectives to bypass the negative effects to the academic staffs.

5.3 Recommendation for Academic Staff

As for the academic staffs who have been involved in income-generating activities at public universities, they are recommended to provide the feedback and comments to the university management based on the problems that they are facing now. Whereas for the academic staffs that have yet to involve in income generation activities, they are advisable to join those meaningful activities so that extra income can be contributed to the university because the funding obtained will never be enough to cover the expenses and development of university in the future.

5.4 Recommendation for Future Research

The future research on income generation activities can be improved to get better research results as if the data collection can be expand to other public universities in Malaysia. Besides, the target respondents from different universities can be categories into Research Universities, Comprehensive Universities and Focus Universities to provide more appreciative information and hence to attain the objectives and broaden the perspectives of income generation to the public universities. Besides, mixed method including qualitative and quantitative research can possibly provide expansive and useful information to the themes of research established.

6. Conclusion

As a conclusion, the income which generated by the academic staffs is at utmost important to the development and sustainability of a university. The two objectives have been achieved in the research, which the researcher is able to identify the types of income generation activities that involved by academic staffs and the challenges faced by them during the activities are carried out. The most popular income-generating activities are the research, consultation and commercialization activities which have been participated by the academic staffs. Whereas, the primary challenge that comes across to the academicians is the implementation of current policy regarding income generation activities is that do not fit the favourable conditions for the academic staffs. Hence, revising the policy is important to overcome the barriers from happening among the academic staffs through effective communication and express their desires to the university top management, so that the decision makers are able to concern from every aspect when forming the new policy. Perhaps this research is significant to those who are concerning on the issues of income generating activities arisen among academic staffs. Through the results gained, certain parties may get known to the root of problems and then, solve it. It will eventually help the university to get a better way in order to attain the optimal results in income generation.

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