Vocational Schools Based on Regional Potential in Indonesia

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Abstract—The aim of this research was to discover about management of vocational schools based on regional potential in Ciamis City is one of several cities in West Java Province, Indonesia. The research used qualitative approach with descriptive analysis. The primary data is interview with the teachers at Vocational School Number 1 Cipaku and the secondary data is vocational school documents from Education Department of Ciamis, report the economic potential of Ciamis from Development Planning Agency of Ciamis and literature review. The results of this research shown that only 14 majors group included in the Agribusiness and Agrotechnology with percentage of total number of 4% or 653 students. There is a gap between majors in vocational school with regional potential in Ciamis, therefore should be an evaluation about relevance for it. In the future, it is the right efforts to reassure society that vocational schools in agribusiness and Agrotechnology is essential and have great prospects.

Keywords—vocational schools; regional potential; agribusiness; agrotechnology

I. INTRODUCTION

One of the most dominant sectors in Indonesia is agriculture [1]. It means that most of Indonesia has potential in agriculture sector, include Ciamis City. Ciamis City is one of several cities in West Java Province, Indonesia. It shown by the high contribution of agriculture, farming, forestry, and fishery on Gross Regional Domestic Product of Ciamis which reached 24.40% [2]. In an effort to utilize and develop this potential to become a regional economic power, human resources with suitable quality and capability are needed. This relevance with the vision of Ciamis City to become developed region towards independence in 2019, with mission to improvement the quality of human resources and development the tough regional economies [3].

Based on the result of regional potential of Ciamis, vocational schools have to reformat great ideas at the same time implementing it because a strong education is characterized by the successful development of human resources to exploit natural resources [4]. Alam [5] in his research on the role of technical and vocational education in the national development of Bangladesh founded that vocational education has helped Bangladesh in improving its economic growth through skilled labor, so that it can play a role in national development. In addition, a research by the European Centre for the Development of Vocational Training [6] with Mitra Refer Net explained that one of the benefits of vocational school on macro basis can increase the economic growth of a region/ country.

However, based on data from Education Department of Ciamis, the majors at vocational schools have not been relevance with regional potential, so this is an impact on the surplus and deficit for output on certain majors. If in the long term this gap is keep going, it will an impact on economic development in Ciamis, Indonesia, such as agricultural as the leading sector of Ciamis will decrease. According to the analysis of regional economic potential [2] in the period 2010-2015 consistently the agricultural commodities decreased from 0, 23% -1, 50%. The other impact is urbanization flow from Ciamis to another city. Until 2015, the percentage of urban residents reached 85% [7]. The Solution from this problem is to implement vocational schools based on regional potential because this education is oriented to human capital investment with the specific purpose to link the demands in economic sector through human resources in occupy of jobs with relevancy skills [8].

The obtained findings, this research aim to discover about management of vocational schools based on regional potential as an effort to produce of human resources that can utilize and develop regional potential so it increases the economic growth for the future in Ciamis, Indonesia.

II. RESEARCH METHOD

This research referred to vocational schools in Ciamis, Indonesia. The research can be categorized as qualitative research which describes a social phenomenon that occurs naturally during the time it is being research [9]. The primary data is interview with the teachers at Vocational School Number 1 Cipaku and the secondary data is documents from Education Department of Ciamis, report the economic potential of Ciamis from Development Planning Agency of Ciamis and literature review by conducting data search through mass media and previous research reports.

The role of researcher as human instrument that decided study focus, chose the informants, collected the data, assessed the quality of the data, analyzed the data, interpreted the data, and made a conclusion [10], then reported the results. By using descriptive analysis and triangulation validation techniques,
this research was expected to be able to discover of vocational schools based on regional potential in Ciamis.

III. RESULTS AND DISCUSSION

Agricultural is the leading sectors in Ciamis, this indicated by the high contribution of agriculture, forestry and fishery sectors to Gross Regional Domestic Product (GRDP) Ciamis reaching 24, 40% [2]. This determination used the data of Gross Regional Domestic Product (GRDP) which has been widely used to formulate economic policy [11]. Based on Location Quotient (LQ) analysis, there are 12 categories of economies classified as base in Ciamis, and agriculture, forestry and fishery categories have the highest LQ value of 2.86 [2]. This high value has become an indication that agriculture is vital sector for stability and growth economic in Ciamis, Indonesia, so to develop this potential, it takes human resources that is able to manage and develop. It can impact on economic development in Ciamis, Indonesia.

The common to relate of economic issues with education, the study on the analysis of educational and economic statistics presented by Habermeier [12] explained that there was a correlation between education, research and the country's macroeconomic forces on a global scale. Furthermore, the International Bank [13] explained that educational investments in Middle East and North Africa countries have greatly increased the level, quantity, and quality of human resources that indirectly impacted on the economic growth of those countries.

The build quality of human resources effectively in order to encourage economic growth, a number of developing countries choose vocational education as an alternative [14], including vocational schools as a part of it. According Comyn and Barnaart [15] in his research stated that bilateral aid agencies, the World Bank and United Nations Educational, Scientific and Cultural Organization (UNESCO) recommend developing countries to develop vocational education for reduce poverty, promote economic growth and enhance competitiveness. Even in European this vocational education is seen as a key tool in the transformation of the European economy [16], because there are many effects that expected to occur in certain countries, regions and economic sectors [17]. The research from Nilsson [18] confirmed that one of the reasons for the development of vocational education in various countries because this education is considered as the right way to encourage economic growth, although it is actually difficult to find a strong empirical evidence that this vocational education has significant impact on economic development.

The Government of Indonesia in the Strategic Plan of the Ministry of National Education 2005-2009 has repositioned the number of vocational schools: secondary schools from 30:70 to 70:30 [18,19], so until year 2016 the number of vocational schools has reached 13.167 units [20]. Otherwise, another aspect that needs to be observed from this re-proportion is the relevance of vocational schools with the regional potential, which one of them seen from the majors in vocational schools.

Generally, the majors have been developed in vocational schools: information and communication technology; technology and engineering; art and craft; performing arts, fisheries and maritime; tourism; health; business and management; agribusiness and agricultural technology [20]. In the implementation, the management of those majors should be related with regional potential, so that graduates can contribute in regional development. There for, schools need to implement school management system based information technology because it can improve information access to businesses and industries, communities and all stakeholders [21]. The following is description of vocational schools in Ciamis, Indonesia:

Figure 1 shown vocational schools in Ciamis identify seven majors with the following details: 54 groups including communication and information technology, 47 groups including business and management, 47 groups including technology and engineering, 8 groups including tourism, 11 groups including health and social work, 14 groups including agribusiness and agrotechnology and 1 group including art and creative economy. Based on the description, vocational schools were dominated by information and communication technology. Nevertheless, it needs to an evaluation of the relevance of the majors in vocational schools (with region potential), both in quality and quantity. The evaluation process should be reviewed carefully and professionally by involving all the authorities: schools, supervisors, educational department, and local licensing agencies. Here are the seven majors of student of vocational schools in Ciamis:

| No | Vocational High School                      | Students | Percentage |
|----|--------------------------------------------|----------|------------|
| 1  | Information and Communication Technologies  | 4108     | 27%        |
| 2  | Business and Management                     | 3230     | 21%        |
| 3  | Technology and Engineering                  | 6307     | 42%        |
| 4  | Tourism                                    | 235      | 2%         |
| 5  | Health and social work                      | 542      | 4%         |
| 6  | Agribusiness and Agro-technology            | 653      | 4%         |
| 7  | Art and Craft                               | 22       | 0%         |
|    | Total                                      | 15097    | 100%       |

Table 1 shown the quantity of student in the agribusiness and agrotechnology was only 4%, with the total number of 653 students that are Vocational School al-Mannar Pamarican, Vocational School al-Islam Nurussalam Cidolog, Vocational School Number 1 Cipaku, Vocational School M'a'arif al-
Qoryah Panawangan, Vocational School Number 1 Panjalu, Vocational School Muhammadiyah 3 Banjarsari, Vocational School of Banjarsari Pasawahan, Vocational School Tarunajaya Banjarsari, Yakpidatek Integrated Vocational School, Vocational School of Darul Falah, and Vocational School Nurul Huda Panumbangan. Based on interviewed with the teachers in Vocational School Number 1 Cipaku, the low quantity of students in agribusiness and agrotechnology because in the general image or impression of this school is marginal people, so students prefer other majors are perceived as prestigious.

In regional economic development, agribusiness and agrotechnology’s students could be involved in the agropolitan area is currently being developed in Ciamis [22]. The agropolitan concept introduced Friedman and Douglass [23] in a conference in Nagoya, he thought agropolitan is a concentrated development activity in rural areas and development concept of agricultural-based with human resources as the most powerful aspect, followed by artificial resources, social resources, and natural resource respectively [24], so resulting in a dynamic economic structure in the agropolitan region [25]. This was in remember that some researches on agropolitan among which Ellenberg [26] suggested that regional development and economic empowerment of today’s society still depend on the development trilogy are economic development, justice and national stability. In this case, vocational schools of agribusiness and agrotechnology can contribute to build the human resources that do innovation agribusiness on leading sectors in agropolitan areas.

IV. CONCLUSION

The results, it could be concluded that the vocational schools based on the regional potential is very important because it can build the human resources to utilizing and developing regional potential so that it impacts on economic growth. In this research, Ciamis City is one of several cities in West Java Province, Indonesia, needs to evaluation about the management of majors in vocational schools (based on region potential), both in quality and quantity to improve the quality of vocational schools in agribusiness and agrotechnology, it needs to be collaboration between school and farmer group through agropolitan. This is an effort to improve the competitiveness of Indonesia in international and increase efficiency in the management of vocational schools.

REFERENCES

[1] Y. Pongi, M. Antara, M. Mahfudz, and R. Rustam, “Superior Commodities Potential and the Strategy Development in Sigi District, Central Sulawesi Province,” International Journal of Business and Management Invention vol. 4 (11), pp. 25-30, 2015.
[2] Development Planning Agency of Ciamis City, Analisis Potensi Ekonomi Kabupaten Ciamis Tahun 2016. Ciamis: Development Planning Agency at Sub-National Level Ciamis, 2016.
[3] Development Planning Agency of Ciamis City, Rencana Pembangunan Jangka Menengah Daerah 2014-2019. Ciamis: Development Planning Agency at Sub-National Level Ciamis, 2014.
[4] Ministry of Education and Culture Indonesia, Strategi Implementasi Revitalisasi SMK (10 Langkah Revitalisasi SMK). Jakarta: Ministry of National Education Indonesia, 2017.
[5] G.M. Alam, “The Role of Technical and Vocational Education in The National Development of Bangladesh,” Asia-Pacific Journal of Cooperative Education, vol. 9 (1), pp. 25-44, 2008.
[6] European Centre for the Development of Vocational Training (Cedefop), The benefits of vocational education and training. Luxembourg: Publications Office of the European Union, 2011.
[7] M.F. Jamil, “Urbanisasi.” [online]. Retrieved from https://www.kompasiana.com/ichaljamil/urbanisasi54f9277a33311ba078b4815, 2017.
[8] J.B.G. Tilak, “Higher Education and Development in Asia,” Journal of Educational Planning and Administration, vol. 17(2), pp. 151-173, 2003.
[9] N. Mack, Qualitative Research Methods: A Data Collector’s Field Guide. USA: U.S. Agency for International Development, 2005.
[10] S. Sugiyono, Metode Penelitian Manajemen. Bandung. Alfabeta, 2013.
[11] K. Chen, and S. Papanyan, U.S. Economic Watch: Economic Analysis Journal of Training and Development, vol. 29, pp. 251-272, 2010.
[12] H.U. Habermeier, “Education And Economy—An Analysis Of Statistical Data, Journal of Materials Education,” vol. 29(1-2), pp. 55-70, 2007.
[13] The International Bank, The Road Not Traveled: Education Reform in the Middle East and North Africa. Washington DC: The World Bank, 2008.
[14] P. Loyalka, “The Impact of Vocational Schooling on Human Capital Development in Developing Countries: Evidence from China.” [Online] Retrieved from https://reap.fsi.stanford.edu/sites/default/files/ImpactOfVocationalSchooling.pdf, 2017.
[15] P. Comyn, and A. Barnaart, “TVET reform in Chongqing: big steps on a long march, Research in Post-Compulsory Education,” vol. 15(1), pp. 49-65, 2010.
[16] Bordeaux Communiqué, “The Bordeaux Communiqué on Enhanced European Cooperation in Vocational Education and Training.” [Online] Retrieved from http://ec.europa.eu/education/lifelonglearningpolicy/doc/vocational/bordeaux_en.pdf, 2017.
[17] T. Baum, “Skills and Training for the Hospitality Sector: a Review of Issues,” Journal of Vocational Education and Training, vol. 54(3), pp. 43-64, 2002.
[18] A. Nilsson, “Vocational Education and Training – an Engine for Economic Growth and a Vehicle for Social Inclusion?,” International Journal of Training and Development, vol. 29, pp. 251-272, 2010.
[19] Ministry of Education and Culture Indonesia, Rencana Strategis Departemen Pendidikan Nasional 2005-2009. Jakarta: Ministry of National Education Indonesia, 2005.
[20] Ministry of Education and Culture Indonesia, Revitalisasi Pendidikan Vokasi. Jakarta: Ministry of National Education Indonesia, 2016.
[21] W.M. Wijaya, Strategic Information System Planning: Information Systems Required in Vocational School Models, Advances in Economics, Business and Management Research, vol. 14, pp. 67-71, 2016.
[22] Harapanakraty, “Petani Sukamanti Ciamis Senang Pengembangan Agropolitan Bawa Berah.” [online] Retrieved from http://www.harapanakraty.com/2013/12/petani-sukamanti-ciamis-senang-pengembangan-agropolitan-bawa-berah/, 2017.
[23] J Friedman, and M. Douglass, “Agropolitan Development: Towards a New Strategy for Regional Planning in Asia.” ResearchGate, pp. 333-387, 1975.
[24] A. Prasetiyawan, “Analysis of Sendang Agropolitan Area Development, Tulungagung,” American Journal of Sociological Research, vol. 4(2), pp. 60-66, 2014.
[25] M. Sakir, “The Effect of Agropolitan Program to Social Economic Conditions of the Farmers,” Scholars Journal of Economics, Business and Management (SJEPM), vol. 4(5), pp. 557-362, 2017.
[26] M. Ellenberg, “Frontier Constellations: Agrarian Expansion and Sovereignty on the Indonesian-Malaysian Border,” The Journal of Peasant Studies, vol. 1(3), pp. 1-26, 2014.